EXHIBIT 19



PROCESS VALIDATION REPORT

DIGOXIN TABLETS, 0.125 mg 1,600,000 TABLETS

BATCHES 4318A, 4320A, and 4322A

MPR NO. 14502

Revision No. 00

Prepared by: Yang 1 Williams

Date Prepared: /2/23/94

Approved by:

Quality Assurance Direct

Date: 12/29/94

Manufacturing Operations Director

Date: 12/11/90

Regulatory Affairs Director

Date: 1228/94

Quality Control Director

Date: 12 2>194

WP Operations

Date: 12-27-94

PROCESS VALIDATION SUMMARY

PRODUCT DIGOXIN TABLETS, 0.125 mg BATCH 4318A 4320A 4322A

The following comments apply to the three 1,600,000 tablet validation batches produced in this series.

This report includes data through Compression, which is the finished dosage form.

The process used to produce this batch follows exactly that shown in the normal batch record. Copies of the actual batch records are available in the file.

The data supporting the validation of the analytical methods used may be found in the Analytical Method Validation Report issued for this product.

A copy of the protocol to be followed for this project is included.

Evaluation of the data includes calculation of the Process Capability Index, Cp, when appropriate. Cp is a measure of the ability of a process to produce material that is all within the specification range. It verifies that the entire distribution curve for the data collected falls within the allowable limits. The following equation is used.

$$Cp = \frac{(Upper Limit - Lower Limit)}{6 \times St. Dev.}$$

Any value equal to or greater than 1 is acceptable.

AMIDE PHARMACEUTICAL, INC. PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg MPR NO. 14502 - 00

CONCLUSIONS AND OBSERVATIONS

All samples met the established acceptance criteria.

Based on these three batches, the process is considered validated and is acceptable for use.

The data verifies the initial acceptance criteria for all parameters. At this point no revision to any of these ranges will be made.

The final blends showed adequate uniformity for all batches. The resulting Cp value is 2.9, which is more than acceptable.

Content uniformity results are all within the acceptance criteria, and are essentially comparable to the blend results.

Results for both the final blends and content uniformity center around the label amount.

All Dissolution samples for the three batches met the USP requirements. The values for the three batches are comparable, however there is some variability within the individual batches.

The data for each protocol step follows a summary of that step, in the order in which it appears in the protocol.

Amide Pharmaceutical, Inc.

Process Validation

DIGOXIN TABLETS, 0.125 mg

Process Validation Summary

Batch Size - 1,600,000 Tablets

Test	Initial Limits	Batch	4318A	4320A	4322A	Combined	Final Limits
Final Blend	85.0 - 115.0 %Th. (Ind.)	Average	5.86	98.8	98.3	98.5	85.0 - 115.0 %Th. (Ind.)
ABBBY (%)		Std Dev	1.0	1.5	1.0	1.1	
		СÞ				2.9	
Compression		Average	0.105	0.105	0.105	0.105	
Weight (g)	0.097 - 0.113 9	Std Dev	0.002	0.002	0.002	0.002	0.097 - 0.113 g
		Сp				1.5	
Compression		Average	4.5	4.5	4.6	4.5	
Bardness (KP)	1.0 - 6.0 kp	Std Dev	0.4	0.4	0.4	0.4	1.0 - 6.5 kp
		Сp				2.2	
Compression		Average	2.63	2.62	2.62	2.62	
Thickness (mm)	2.0 - 3.0 mm	Std Dev	0.03	0.03	0.03	0.03	2.0 - 3.0 mm
		Сp				5.7	
Compression		Average	60.0	0.08	0.08	0.08	
Friability (8)	NMT: 1.0 %	Std Dev	0.03	0.03	0.03	0.03	NMT: 1.0 8
Compression		Average	3.2	3.3	3.3	3.3	
Disintegration (min)	N/A	Std Dev	0.4	0.5	0.5	0.5	N/A
Compression		Ачетаде	101.3	100.4	101.3	101.0	
Content Uniformity (%)	85.0 - 115.0 %	Std Dev	1.1	1.7	1.7	1.6	85.0 - 115.0 %
٠	RSD NMT: 6.0 %	СĎ				3.2	RSD NMT: 6.0 8
Compression		Average	83.0	85.0	81.4	83.1	
Dissolution (%)	NMT: 90% (ind.)	Std Dev	2.2	2.1	2.5	2.7	NMT: 90% (hmd.)
15 min.							
Compression		Average	97.2	99.7	97.2	0.86	
Dissolution (%)	NLT: 80% (avg)	Std Dev	2.3	3.2	3.1	3.1	NLT: 80% (mwg)
60 min.							

AMIDE PHARMACEUTICAL, INC. PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg MPR NO. 14502 - 00

PROTOCOL STEP - RAW MATERIALS

The raw materials used will be tested, as stated in the protocol, in accordance with approved specifications and methods. In addition, bulk density, tamped density and particle size distribution will be included.

ACCEPTANCE CRITERIA

Parameters normally evaluated will be compared to the current specifications. The density and particle size data will be gathered and used to formulate guidelines when sufficient data is accumulated.

RESULTS - See attached data summary sheets.

CONCLUSIONS AND COMMENTS

All data is acceptable.

Any differences noted do not appear to have any effect on finished product quality.

Particle size determinations were run on two different pieces of equipment. One is a "Ro-Tap" type unit and the other a Micron Air Jet Sieve. For samples run on the "Ro-Tap" the coarser mesh screen is listed first.

It should be noted that particle size and density evaluation was not done for the Yellow Lake Blend. Since this material is present in such a small amount any differences in either of these parameters will have no significant effect on the final blend.

The particle size distribution for Digoxin P.O. No. 2629-1 was run on the "Ro-Tap" type shaker. That for P.O. No. 3929 was run on the Micron Air Jet Sieve. The results obtained on the two units differed significantly. Due to the fact the two units employ different technologies no comparision wil be made. It should be noted that no effect on content uniformity or dissolution was observed.

PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg

11 tess # 3115	
Item Name Corn Starch, NF Digoxin, USP D&C Yellow #10 Aluminum Lake 15-20% Croscarmellose Sodium, NF Lactose Hydrous Impalpable, NF Starch Pregelatinized, NF Microcitystalline Cellulose, NF Lactose Anhydrous, NF Stearic Acid, NF Stearic Acid, NF	
P.O. # 4025 2629-1 3844 4026 4028-1 4027 4023 4015 3910 3696	8atch # 4318A
P.O. # 4025 2629-1 & 3929 3844 4026 4028-1 4027 4023 4015 3910 3696	Batch # 4320A
P.O. # 4025 3929 3844 4026 4028-1 4027 4027 4023 4015 3910 3696	Batch # 43

MICROBIAL LIMITS

Passes Tes Positive Positive Passes Test SPECIFICATIONS

Passes 5.7

Passes

ON DRYING 운

14.0% 0.5%

IGNITION.

DENTIFICATION B DENTIFICATION ESCRIPTION

PARTICAL SIZE

325)

Retained

3.9%

SU) SU)

100) / Retained 200) / Retained BULK DENSITY

SUBSTANCES

Passes Passes Test

Test

Passes 0.52 g/mL 0.72 g/mL

Sassed < 0.002%

TAP DENSITY

AMIDE PHARMACEUTICAL, INC.

PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg

Raw Material Comparison - Corn Starch,

Z,

(3115

P.O. #	4025
Test Type	Initial
Manufacturer	
Manufacturer Lot #	HD-6628

PARAMETERS

SPECIFICATIONS

RESUL IS

DESCRIPTION

ASSAY

RESIDUE ON IGNITION

NMT 3%

95.0 -

101.0%

98.6%

0.7%

< 31%

0.6%

DENTIFICATION A
DENTIFICATION B
DENTIFICATION C
OSS ON DRYING

NMT 1.0%

Positive

Passes

Passes

Passes Test
Positive

Passes Passes

Passes

RESULTS Passes

Passes

BULK DENSITY

PARTICLE SIZE (US 325) % Retained

PARTICLE SIZE

SU)

200)

7. Retained

95.6%

0.24 g/ml 0.37 g/ml

0.36 g/ml

0.23 g/m

TAP DENSITY

AMIDE PHARMACEUTICAL, INC.

PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg

Rau
Material
Comparison -
Dıgoxın
dSn
.(011

Test Type Initia Manufacturer 240180	2629-1 3929 Initial Initial 240180 240254
--	---

PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg

Raw Material Comparision -

D&C Yellow #10 Aluminum Lake 15-20% (3044)

	Test Type	Initial
	H	
	Manufacturer Lot #	Aa-7934
	Contraction	
	SPECIFICATIONS	RESULTS
	Passes Test	Passes
ž	Positive	Passes

	Manufacturer	
	Manufacturer Lot #	# Aa-7934
PARAMETERS	SPECIFICATIONS	RESULTS
DESCRIPTION	Passes Test	Passes
IDENTIFICATION Positive	Positive	Passes
Loss on Drying N/A	N/A	15.48

PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg

Marorial Companies -

Rau Material Comparison - Croscarmellose Sodium, NF (3000)

P.O. #	4026
Test Type	Initial
Manufacturer	
Manufacturer Lot #	T434N

TERS	SPECEFICATIONS	RESULTS
PTION	Passes Test	Passes
FICATION A	Positive	Passes
FICATION 8	Positive	Passes
FICATION C	Positive	Passes
	5.0 - 7.0	6.5
N DRYING		2.5%
METALS	NMT 0.001%	< 0.001%
CHLORIDE & SODIUM STARCH GLYCOLATE NMT 0.5%	NMT 0.5%	0.21%
OF SUBSTITUTION	0.60 to 0.85	0.69
IT OF WATER SOLUBLE MATERIAL	1.0% - 10.0%	3.2%
NG UOLUME	10.0 mL - 30.0 mL	22 mL
IAL TEST		Passes
ENSITY		0.50 g/ml
NSITY		0.72 g/mL
LE SIZE (US 325)	% Retained	5.7%
F 617F (118 200)	/ Detained	0 0.

PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg

Material Comparison -

Rau Materaial Comparison – Lactose Hydrous Impalpable NF

(3051)

P.O. #	4028-1
Test Type	Initial
Manufacturer	
Manufacturer Lot #	034/435
	The state of the s

PARAMETERS	SPECIFICATIONS	RESULTS
DESCRIPTION	Passes Test	Passes
IDENTIFICATION A	P05111Ve	Passes
IDENTIFICATION B	Positive	Passes
CLARITY AND COLOR OF SOLUTION	Passes Test	Passes
LOSS ON DRYING	NMT 1.0%	0.3%
SPECIFIC ROTATION	+54.8° to +55.5°	+55.3°
MICROBIAL LIMITS	Passes Test	Passes
WATER	Hydrous: NMT 5.5%	5.1%
RESIDUE ON IGNITION	MT 0.1%	0.03%
HEAUY METALS	NMT 5 ppm	< 5 ppm
ACIDITY/ALKALINITY	Passes Test	Passes
R.	Passes Test	Passes
ORGANIC VOLATILE IMPURITIES	Passes Test	Passes
BULK DENSITY		0.58 g/mL
TAP DENSITY		0.87 g/mL
PARTICAL SIZE (US 200)	7. Retained	83.7%
CONTICAL SIZE (IIS 325).	Not alond	ت س

PROCESS VALIDATION

DIGOXN TABLETS, 0.125 mg

Rau Material Comparison - Starch Pregelatinized NF (3088)

	The second secon
P.O. #	4027
Test Type	Initial
Manufacturer	
Manufacturer Lot #	403 107

PARAMETERS	SPECIFICATIONS	RESULTS
DESCRIPTION	Passes Test	Passes
IDENTIFICATION	Positive	Passes
PH	4.5 - 7.0	5.9
IRON	NMT 0.002%	<0.002 %
OXIDIZING SUBSTANCES	Passes Test	Passes
SULFUR DIOXIDE	NMT: 0.008%	Passes
MICROBIAL LIMITS	Passes Test	Passes
LOSS ON DRYING	NMT 14.0%	8.8%
RESIDUE ON IGNITION	NMT 0.5%	0.2%
BULK DENSITY		0.66 g/mL
TAP DENSITY		0.84 g/mL
PARTICAL SIZE (US 100)	% Accumulation	2.7%
PARTICAL SIZE (US 200)	% Accumulation	26.6%
DARTICAL SIZE (US 325)	N Accumulation	51.5%

PROCESS VALIDATION DIGOXIN TABLETS, 0.125 mg

u Material Comparison - I

Rau Material Comparison - Microcrystalline Cellulose, NF (3059)

		4023 Initial
--	--	-----------------

PARAMETERS	SPECIFICATIONS	RESULTS
DESCRIPTION	Passes Test	Passes
IDENTIFICATION	Positive	Passes
PH	5.5 to 7.0	6.1
LOSS ON DRYING	NMI 5.0%	2.5%
RESIDUE ON IGNITION	NMT 0.05%	0.02%
HATER SOLUBLE SUBSTANCES	NMT 0. 16%	0.10%
HEAUY METALS	NMT 0.001%	<0.001%
STARCH	Passes Test	Passes
ASSAY	97.0% - 102.0%	99.7%
BULK DENSITY		0.34 g/m
TAP DENSITY		0.43 g/m
PARTICAL SIZE (US 325)	7. Retained	44.7%
PARTICAL SIZE (US 200)	2. Retained	20.6%
DADITON SIZE (US 100)	Netained	Z

PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg

Rau Material Comparison - Lactose Anhydrous, NF (DT) (3050)

P.O. # 40	40 15
<u>Test Type</u> Ir	Initial
Manufacturer	
Manufacturer Lot # MF	MRP54536

PARTICAL SIZE (US 325)	DARTICAL SIZE (US 200)	DARIICAL SIZE (US 100)	TAP PANSITY	BULK DENSITY	DREANIC VOLATILE IMPURITIES	PROTEIN AND LIGHT ABSORBING IMPURITIES	ACIDITY/ALKALINITY	HEAVY METALS	RESIDUE ON IGNITION	HATER	MICROBIAL LIMITS	SPECIFIC ROTATION	LOSS ON DRYING	CLARITY AND COLOR OF SOLUTION	IDENTIFICATION B	IDENTIFICATION A	DESCRIPTION	PARAMETERS	
% Accumulation		? Accumulation			Passes Test	NMT 0.25	Passes Test	NMT 5 ppm	NMT 0.1%		NMI 100 per qm	Between +54.8° and +55.5°		Passes Test	Positive	Positive	Passes Test	SPECIFICATIONS	
40.5%	28.6%	13. 1%	0.81 g/m	0.57 g/m	Passes	Passes	Passes	< 5 ppm	0.04%	0.4%	Passes	+55.2°	0.2%	Passes	Passes	Passes	Passes	RESULTS	

PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg

IGOXIN LABLETS, 0.725 L

Rau Material Comparison - Stearic Acid, NF (3089)

P.O.#	39 10
Test Type	Initial
Manufacturer	
Manufacturer Lot #	440069

PARAMETERS	SPECIFICATIONS	RESULTS
DESCRIPTION	Passes Test	Passes
CONGEALING TEMPERATURE	NLT 540	55°
RESIDUE ON IGNITION	NMT O. 1%	0.01
HEAUY METALS	NMT 0.001%	<0.001
MINERAL ACID	Passes Test	Passes
NEUTRAL FAT OR PARAFIN	Passes Test	Passes
IODINE UALUE		0.10
ASSAY A	NLT 40.0%	43.4%
ASSAY 8	NLT 90.0%	96.4%
ORGANIC UDLATILE IMPURITIES Passes Test	Passes Test	Passes
BULK DENSITY		0.38 g/ml
		0.49 g/ml
	7. Retained	54.0%
	2. Retained	6.4%

OSS ON DRYING

NMI 5.0%

<u>(0. 17.</u>

NMI 0.003%

(0.5% (3.ppm (0.003%

99.6%

10 g/ml

DENTIFICATION

SPECIFICATIONS
Passes Test
Postitive

Passes

RESULTS

SCRIPTION

BULK DENSITY
PARTICAL SIZE

SU)

325)

HEAVY METAL

AMIDE PHARMACEUTICAL, INC.

DIGOXIN TABLETS, 0.125 mg

PROCESS VALIDATION

Raw Material Comparison - Silicon Dioxide, NF (3081)

P.O. # 3696
Test Type Initi

Manufacturer Lot #	Manufacturer	Test Type	P.O. #	
4-90		lInitial	3696	

DIGOXIN TABLETS, 0.125 mg MPR NO. 14802 - 00

PROTOCOL STEP - TEMPERATURE/HUMIDITY READINGS

Temperature and humidity readings will be taken in the production area. These three batches ran in production between 11/8/94 and 11/18/94.

RESULTS - See attached data summary sheets.

CONCLUSIONS AND COMMENTS

The temperature ranged from 58 - 65° F, and the relative humidity from 43 - 58% It should be noted that this is the first production in the new production rooms and that inadvertantly some readings were not taken. The data collected indicates that acceptable product can be made under these conditions.

TEMPERATURE/HUMIDITY READINGS

PERIOD COVERING DIGOXIN TABLETS, 0.125 mg

BATCHES 4318A, 4320A, AND 4322A

LOCATION	DATE	TEMP. (Deg. F)	RH (%)	
Near Pr. Rm. #117	11-Nov-94	58		43
Near Pr. Rm. #117	18-Nov-94	65		58

ANIDE PHARMACEUTICAL, INC. PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg MPR NO. 14502 - 00

STEP - BLEND UNIFORMITY

Utilizing a sampling thief, sample each of the blenders from the positions shown on the attached data summary. Separately analyze, and report, each one for active ingredient content.

The speed of each blender will be monitored both empty and at each stage of blending.

ACCEPTANCE CRITERIA

Final Blend - 85.0 - 115.0 % Th. (Individual)

RESULTS - See the attached data summary.

CONCLUSIONS AND COMMENTS

The final blends for the three batches met all acceptance criteria and appear to be uniformly blended.

The bulk and tamped density results are comparable for all three batches.

The speed for both blenders was observed to be constant throughout production of the three batches. The same speed was obtained both empty and under load. The supporting documentation is attached.

3 Cu. Ft. (32) - 22 rpm 10 Cu. Ft. (35) - 16 rpm

PROCESS VALIDATION

DIGOXN TABLETS, 0.125 mg

FINAL BLEND - Assay (% Label)

Right Column - Top Left 97.3 93.6 98.0 Right Column - Top Center 98.3 98.0 97.5 Right Column - Top Center 98.3 98.0 97.5 Right Column - Top Right 98.3 98.4 98.3 Riddle Left 96.8 99.2 99.4 Middle Center 100.1 100.4 100.1 Middle Center 100.1 100.8 98.1 Bottom Left 98.0 98.0 98.7 Bottom Right 99.0 100.7 99.1 Average 98.5 98.8 98.3

PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg

FINAL BLEND - Density/Particle Size - Batch # 4318A

Density (q/ml)

	Top Center	Top Left	Top Right
Bulk	0.61	0.61	0.61
Тар	0.89	0.89	0.90

Partcle Size (% Retained)

P			
Mesh Size	Top Center	Top Left	Top Right
325	54.5	53.3	54.3
200	34.8	34.5	34.8
100	14.6	14.9	15. 1
60	4.4	4.5	4.2
40	Nil	N ₁ l	Nil

FINAL BLEND - Density/Particle Size - Batch # 4320A

Density (q/ml)

DC1131 (9 (9	, 117 4 /			
	Top	Center	Top Left	Top Right
Bulk		0.62	0.61	0.61
Тәр	-	0.91	0.90	0.90

Partcle Size (% Retained)

	Mesh Size	Top Center	Top Left	Top Right
	325	53.7	53.7	53.6
	200	34.3	34.5	34.1
	100	14.9	15.2	15. 1
i	60	4.2	4.5	4.7
ì	40	Nıl	Nil	Nil

FINAL BLEND - Density/Particle Size - Batch # 4322A

Density (q/ml)

Density	_\4	7 111 3 7				
		Top	Center	Top Left	Top Righ	ī
Bulk			0.61	0.61	0.6	П
Тар			0.90	0.90	0.90	

Partcle Size (% Retained)

	Mesh Size	Top Center	Top Left	Top Right
1	325	53.1	53.4	53.0
	200	34.1	34.6	34.2
) [100	15.3	15.3	15. 1
1	60	4.2	4.1	4.4
	40	Nil	Nil	Nil

Amide Pharmaceutical, Inc.

PROCESS VALIDATION DATA SHEET

PRODUCT HAME (1): Digoxin	Tablets (145)		
BATCH 1: 4318A	HPR 1: 14502	REV 1: 00	DATE: 1/18794
BLENDER 1: 32			

TIME	BLENDER'S CONTENTS	BLENDER'S THEO. MATERIAL WEIGHT (Kg)	BLENDER 'S RPM	DONE BY	BY CHECKED
4:25Pm	EMPTY.	#111989 22010	22	kp.	되
4:57Pm	STEP#1 R.M. FO# 3115+0111+3044+3000	18-80	22	kΥ	T
	GT = 0 + 1 1 2 1 1 2 1 1 2 1 1	1,7.26	0.2	KP	zł
5:14 Pm	STEP#2 STEP#1+3051	47.36	22		
				-	Mark 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	<u> </u>				

PD2-046

Pharmaceutical, Inc.

PROCESS VALIDATION DATA SHEET

PRODUCT HAME (1): Digoxin	Tablets 0.125mg	(145)	
BATCH 1: 4318 A	HPR 1: 14502	REV #: 00	DATE: 11/8/94
BLENDER 1: 35			

TIME	BLENDER'S CONTENTS	MBÍCHT (Kg) THBO: MYTBRIAT BIBHDBB'B	BLENDER S	BA DONE	BA CHROKED
4115Bm	EMPTY	0.00kg	16	kr	ΞP
-11/3440	STEP \$ 1.		10		
6:02Pm	PRE BLEND + 3088 +3059 STEP #2	79-38/11889	16	kr	Tl
6:35Am		162.56	16	kl	Il
7:02Pm	57EP # 2+3089+3081	168:00	16	K8	I.P
7-02111	3/6/ # 2/300///				
	·				
			<u>-</u>		
1, -					
	· · · · · · · · · · · · · · · · · · ·				

Amide Pharmaceutical, Inc.

PROCESS VALIDATION PATA SHEET

PRODUCT HAME (1): Digoxin	Tablets 0-125%	9 (145)	
BATCH 1: 4320A	HPR 1: 14502	REV 1: 00	DATE: 11/10/94
BLENDER 1: 32			

TIME	BLENDER'S CONTENTS	HEIGHT (KG) THEO: HYTERIYI BLENDERIA	BLENDER'S RPH	BA BONE	ва Сивскер
2:35B	EMPTY	0-00	22	kr	<u>I</u>
	STEP#	18-80	22	KY	H°
3:028n	R·M·FD# 3115+0111+3044+3000 STEP # 2.	16 80			
3:32 R	STEP #1 + 3051	47.36	22	Kr.	Il
)					
1-					
<u>.</u>					
				_	
			_		
				_	
I					

mide Pharmaceutical, Inc.

1

REGGRES ASPIDATION DATA SHEET

PRODUCT HAME (1): Digoxin Tablets 0-125mg (145)

BATCH 1: 4320 A HPR 1: 14502 REV 1: 00 PATE: 11/10/74

BLEHDER 1: 35

TIHE	всением в сонтента	HEIGHT (kd) BLENDER'S	BLENDER E RPH	BY DONE	BA CHECKED
2:40pm	EMPTY	0.00	16	kr	IP
4=26Pm	STEP # . R.M. 70# PREBLEND + 3088 + 3059	111.36	16	Kr	Il
<u> 4:47ρ</u>	STEP# 2 STEP# 1 + 3050	162.56	16	kΙ	-P
12 Pm	STEP # 3 STEP#2+3089+3081	168.00	16	ИP	ZP
					PD2-046

Amide Pharmaceutical, Inc.

1

BROCKER VALIDATION DATA SHART

PRODUCT HAHE (1): Digoxin Takets 0.125mg (145)

BATCH 1: 4322A HPR 1: 14502 REV 1: 00 PATE: 11/11/94

BLEHDER 1: 32

TIME	BLENDER'S CONTENTS	HEIGHT (KA) THEO. HYLEBIYE BLENDERIA	BI ENDER A	BY DONE	BA Cliecked
					If
10:05 Am	EMPTY.	0.00	22	AU.	4
·	STEP # R.M. FOR 3115 + 0/1/+ 3044+3000	18.80	22	px	D
12:17Pm	3115 + 0111 + 3044 + 3000 STEP # 2	10 00			
12:45 Pm		47.36	22	PV	II.
			_	_	
				_	
				_	

, Pharmaceutical, Inc.

PROCEES VALIDATION DATA SHEET

PRODUCT HAME (1): Digoxin	Tables 0.125mg	(145)	
BATCH 1: 4322 A	HPR 1: 14502	REV 1: 00	DATE: 1////94
BLEHDER 1: 35			

TIME	BLENDER'S CONTENTS	HEIGHT (kg)	BLBHDER!A RPH	PONE BY	BA CHECKED
 /2:30A	Емрту	0.00	16	PVS	T/
	STEP # RM IDA	//·36	16	Pey	
	PRE BLEND + 3088 + 3059 STEP # 2	162.56	1/		Tl
1:52 Pm	STEP # 3	i	16	PV	
2:49 Bm	STEP # 2 + 3089+3081	168.00		PV	T.
					,

AMIDE PHARMACEUTICAL, INC. PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg MPR NO. 14502 - 00

PROTOCOL STEP - COMPRESSION

Samples were taken from each side of the press each 30 minutes and were evaluated for the following parameters.

Weight (n = 10)Thickness (n = 5)Hardness (n = 5)

These samples will be arranged chronologically and the batch divided into thirds. Front and rear will be analyzed separately as follows.

Friability 10 g - 1 runDissolution N = 12 (6 front & 6 rear)Disintegration N = 6

Content uniformity is to be run across the entire batch. One tablet from each sample taken is to be run from the front, and one from the rear. A minimum of 30 is required from each side.

During compression a minimum quantity of tablets will be run at speeds higher and lower than normal. The actual speeds will be selected during production. These tablets will be evaluated for weight and hardness.

During compression minimum quantities of tablets will be run at hardness of 0.5 - 2 KP and greater than 6 KP. An attempt will also be made to run some tablets at the highest possible hardness that can be obtained without capping. These tablets will be evaluated for Dissolution and Friability.

ACCEPTANCE CRITERIA

Weight: 0.097 - 0.113 g Hardness: 1.0 - 6.0 KP Thickness: 2.0 - 3.0 mm Friability: NMT 1.0 %

Dissolution: Meets USP Requirement

Disintegration: N/A (for characterization only)

Content Uniformity: 85.0 - 115.0 % TH, (RSD NMT 6.0 %)

Assay: 90.0 - 105.0 % Label

RESULTS - See attached data summary sheets.

ANIDE PHARMACEUTICAL, INC. PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg MPR NO. 14502 - 00

CONCLUSIONS AND COMMENTS

The samples met all acceptance criteria.

The values for weight, hardness, and thickness for the three batches were comparable to each other and showed no unusual shifts or trends. The overall averages for weight ,hardness and thickness are very close to the midpoints of the preset ranges. Therefore, no revisions to these limits are indicated by the validation data. Results are attached in both tabular and graphical form.

Content Uniformity was within limits for all samples tested, with no significant trends being observed. All values were within 93 - 105 % Label. The values obtained were observed to agree favorably with the blend assays. It should be noted that the averages for the blend assays, and the content uniformity results are essentially the label amount.

All Dissolution samples for the three batches met the USP requirements. This statement is true for both USP XXII (60 Min.) and XXIII (15 & 60 Min.). The values for the three batches were comparable.

Friability values were all well within the acceptance criteria, and comparable for the three batches.

Disintegration results were comparable with no unusual shifts or trends. Note that this test was run for characterization only, and therefore no acceptance criteria have been, or will be, established.

Acceptable tablets were produced at the low press speed for all three batches, and at high speed for batches 4318A & 4320A. Unacceptable tablets (weight variability) were produced at high speed for batch 4322A. The normal, high, and low operating speeds for each batch are as follows. Based on the data obtained here, the press may be safely run a slow as 14 rpm. No upper limit can be set at this time.

AMIDE PHARMACEUTICAL, INC. PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg MPR NO. 14502 - 00

BATCH	NORMAL	HIGH	LOW
4318A	21 rpm	26 rpm	14 rpm
4320A	21 rpm	26 rpm	14 rpm
4322A	21 rpm	26 rpm	14 rpm

The high and low hardness validation produced acceptable tablets at both ends of the range. Tablets with hardness above the upper limit could not be produced. Therefore the guideline will remain at 1.0 - 6.0 KP. The values for friability are listed below. Those for dissolution are attached.

FRIABILITY (%)

BATCH	4318A	4320A	4322A
LOW KP FRONT	0.2	0.2	0.04
REAR	0.1	0.2	0.2
HIGH KP FRONT	0.03	0.1	0.04
REAR	0.04	0.04	0.1

The results for the overall composites are attached. These are also all within the acceptance criteria, and are essentially comparable to those obtained for the individual samples.

PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg - Betch # 4318A

Compression - Weight (g) - Front

Γ	Date	Tine	1	2	3	4	5	6	7	8	9	10	Average	St Dev.	RSD
Γ	11/11/94	1:50 PM	0. 105	0. 104	0 . 105	0. 106	0.106	0.106	0.107	0.105	0. 102	0.104	0. 105	0.001	1.3
Γ	11/11/94	2:45 PM	0.104	0. 105	0.105	0. 105	0.104	0.107	0. 104	0. 103	0. 105	0. 103	0. 105	0.001	1.1
Г	11/11/94	3:20 PH	0. 106	0. 106	0.108	0.105	0. 107	0. 106	0. 106	0. 105	0.108	0.107	0. 106	0.001	1.0
Г	11/11/94	4:00 PM	0. 105	0. 106	0, 108	0.105	0. 103	0.106	0. 104	0. 106	0.104	0.106	0.105	0.001	1.3
Γ	11/11/94	4:30 PM	0.108	0. 104	0.105	0. 107	0.108	0.107	0. 105	0. 106	0. 105	0.106	0.106	0.001	1.3
	11/12/94	7:25 AH	0.108	0. 107	0. 107	0.106	0. 107	0.107	0.108	0.106	0. 106	0.107	0.107	0.001	0.7
Г	11/12/94	7:55 AM	0.106	0.109	0.108	0.106	0.108	0.106	0.110	0. 107	0.108	0.108	0. 108	0.001	1.3
Γ	11/12/94	8:25 AM	0. 105	0. 107	0.104	0.106	0.105	0.112	0.106	0. 107	0. 105	0. 105	0.106	0.002	2.1
	11/12/94	8:55 AH	0. 109	0. 107	0.101	0.105	0.105	0.105	0. 103	0. 107	0. 107	0.105	0. 106	0.002	1.7
	11/12/94	9:25 AM	0. 105	0. 106	0.106	0.104	0.106	0.106	0. 107	0. 105	0.107	0.106	0.106	0.001	0.9
Ι	11/12/94	9:55 AM	0.106	0. 109	0, 106	0, 108	0.104	0, 107	0.106	0. 106	0.101	0. 107	0, 106	0.002	1.5
	11/12/94	10:25 AM	0.103	0. 104	0.109	0. 107	0.107	0.105	0.108	0. 105	0.108	0.106	0. 106	0.002	1.7
	11/12/94	11:50 AM	0.105	0.108	0. 106	0. 103	0. 106	0. 107	0. 105	0. 103	0.104	0.106	0. 105	0.002	1.6
	11/12/94	12:20 PM	0.098	0. 106	0, 105	0.104	0. 105	0.105	0.108	0. 105	0. 104	0. 107	0. 105	0,003	2.5
L	11/12/94	12:50 PM	0.105	0.106	0.105	0.107	0.104	0.106	0. 106	0.109	0.107	0.105	0.106	0.001	1.3
I	11/12/94	1:20 PM	0, 106	0.104	0. 105	0.104	0.106	0.103	0. 105	0.104	0.104	0. 105	0.105	0.001	0.9
Г	11/12/94	1:50 PM	0.103	0. 104	0. 103	0.106	0.104	0.104	0.104	0.107	0. 105	0.105	0.105	0.001	1.2
	11/12/94	2:20 PM	0. 105	0. 103	0. 104	0.105	0. 105	0. 105	0.105	0.104	0. 105	0.106	0.105	0.001	0.8
	11/14/94	8:20 AM	0. 106	0. 104	0. 106	0.104	0.105	0.105	0.104	0. 109	0, 105	0.103	0.105	0.002	1.6
L	11/14/94	8:45 AM	0.104	0. 105	0. 103	0.106	0. 106	0.106	0.106	0.107	0.103	0.104	0.105	0.001	1.3
	11/14/94	9:15 AM	0. 106	0. 106	0. 107	0. 107	0. 105	0.105	0. 105	0. 106	0.106	0.106	0.106	0.001	0.7.
L	11/14/94	9:45 AM	0. 105	0. 106	0. 106	0.104	0. 106	0.105	0. 104	0. 104	0. 105	0.106	0.105	0.001	0.8
1	11/14/94	10:15 AM	0. 104	0. 105	0. 106	0.104	0. 106	0.104	0.105	0.103	0. 105	0.106	0, 105	0.601	1.0
•	11/14/94	10:45 AM	0. 106	0.106	0. 106	0. 103	0. 105	0. 107	0, 103	0.106	0.107	0.104	0.105	0.001	1.1
L	11/14/94	1:25 PM	0. 103	0.105	0. 104	0.105	0. 102	0. 107	0.107	0. 106	0. 104	0.104	0.105	0.002	1.6
1	11/14/94	1:50 PM	0.106	0. 103	0. 105	0.105	0. 103	0. 104	0. 107	0. 104	0. 106	0.104	0.105	0.001	1,3
L	11/14/94	2:45 PM	0.105	0.105	0. 106	0.106	0.105	0. 106	0.104	0. 105	0. 106	0.102	0.105	0.001	1.2

Compression - Weight (g) - Rear

Date	Tine	1	2	3	4	5	6	7	8	9	10	Average	St Dev.	RSD
11/11/94	1:50 PH	0.106	0. 102	0. 104	0. 104	0.100	0.107	0. 103	0.104	0.106	0.103	0.104	0.002	2.0
11/11/94	2:45 PM	0.105	0.107	0. 104	0. 105	0.106	0.102	0. 105	0.107	0. 105	0.104	0.105	0.001	1.4
11/11/94	3:20 PH	0. 107	0. 102	0. 104	0.108	0. 106	0.105	0. 103	0. 105	0. 108	0. 103	0. 105	0.002	2.0
11/11/94	4:00 PM	0.103	0.108	0. 109	0, 105	0.106	0.103	0.104	0. 103	0.107	0.107	0.106	0.002	2.1
11/11/94	4:30 PM	0.106	0.101	0. 106	0.108	0. 104	0.107	0. 106	0. 103	0.105	0.100	0. 105	0.003	2.5
11/12/94	7:25 AM	0. 102	0. 105	0. 106	0.109	0. 107	0.107	0. 104	0.105	0. 108	0.107	0. 106	0.002	1.9
11/12/94	7:55 AM	0.109	0.104	0, 105	0.108	0. 107	0.109	0. 108	0. 107	0. 103	0.101	0, 106	0.003	2.6
11/12/94	8:25 AM	0. 106	0. 108	0. 103	0. 104	0. 107	0. 107	0.109	0. 103	0. 107	0.109	0.106	0.002	2.1
11/12/94	8:55 AM	0.103	0. 104	0. 107	0.108	0. 109	0.107	0. 107	0.109	0. 103	0.105	0. 106	0.002	2.2
11/12/94	9:25 AM	0.106	0. 103	0. 102	0.104	0.104	0. 102	0.104	0.106	0. 100	0, 105	0.104	0.002	1.8
11/12/94	9:55 AM	0.106	0. 103	0. 107	0.107	0.108	0, 104	0. 104	0. 107	0. 109	0.104	0. 106	0.002	1.9
11/12/94	10:25 AM	0.104	0.105	0. 102	0.104	0.106	0.105	0. 107	0.104	0. 106	0.104	0. 105	0.001	1.4
11/12/94	11:50 AM	0. 107	0.107	0. 107	0. 107	0.100	0.108	0. 105	0. 102	0.107	0.106	0. 106	0.003	2.5
11/12/94	12:20 PH	0. 107	0. 105	0.108	0. 104	0. 107	0. 103	0. 102	0.104	0.107	0.107	0.105	0,002	2.0
11/12/94	12:50 PM	0.106	0. 105	0.107	0.104	0. 108	0.106	0.110	0.106	0, 105	0.105	0.106	0.002	1.6
11/12/94	1:20 PM	0.106	0. 105	0.106	0. 105	0.104	0. 101	0. 107	0.106	0. 107	0.110	0. 106	0.002	1.7
11/12/94	1:50 PM	0. 107	0. 107	0. 107	0.106	0.107	0. 105	0. 105	0. 108	0. 107	0.105	0. 106	0.001	1.0
11/12/94	2:20 PH	0.106	0. 107	0. 105	0. 107	0. 104	0. 107	0. 106	0. 109	0. 106	0. 107	0. 106	0.001	1.3
11/11/91	0:20 AM	0. 104	0. 105	0.103	0. 108	0. 105	0. 106	0. 104	0. 108	0. 107	0.104	0. 105	0.002	1.7
11/11/91	8:45 AM	0. 101	0. 107	0. 104	0. 104	0.106	0. 103	0.101	0. 105	0. 107	0.105	0, 105	0.002	1.8
11/11/91	9:15 AM	0. 106	0. 104	0. 106	0. 104	0. 102	0. 104	0. 105	0. 107	0.105	0.104	0. 105	0.001	1.1
11/11/91	9:45 AM	0, 107	0. 106	0. 104	0. 104	0.103	0. 102	0. 106	0. 103	0.106	0. 106	0.105	0.002	1.6
11/14/94	10:15 AM	0. 103	0. 105	0. 103	0. 107	0. 105	0. 106	0. 104	0.104	0.105	0.106	0. 105	0.001	1.3
11/14/94	10:45 AM	0. 105	0.101	0. 105	0.108	0. 103	0. 102	0. 102	0. 106	0.104	0. 106	0.104	0.002	2.1
11/14/94	1:25 PH	0. 107	0.103	0. 103	0.106	0. 105	0. 106	0.103	0. 106	0.105	0. 109	0. 105	0.002	1.8
11/14/94	1:50 PH	0.103	0.104	0.102	0.104	0.110	0. 105	0. 107	0.105	0.106	0.104	0. 105	0.002	2.2
11/11/94	2:45 PM	0.104	0. 104	0.103	0.106	0.106	0. 106	0. 107	0.103	0. 103	0.107	0. 105	0.002	1.6

PROCESS VALIDATON

DIGOXIN TABLETS, 0.125 mg - Betch # 4320A

Compression - Weight (g) - Front

Date	Tine	1	2	3	4	5	6	7	8	9	10	Average	St Dev.	RSO
11/14/94	5:15 PM	0.101	0.105	0.106	0. 105	0. 105	0. 104	0.103	0, 107	0. 104	0. 105	0. 105	0.001	1.1
11/14/94	5:45 PM	0. 106	0. 106	0.104	0.103	0.105	0. 105	0. 105	0. 102	0. 103	0. 104	0. 104	0.001	1.3
11/14/94	6:15 PM	0. 107	0.105	0.104	0.104	0.104	0. 104	0. 108	0. 106	0.106	0. 104	0. 105	0.001	1.4
11/14/94	6:45 PM	0.102	0.106	0.103	0.106	0.104	0. 106	0. 107	0. 103	0, 105	0. 105	0. 105	0.002	1.6
11/14/94	7:15 PH	0. 106	0.105	0.104	0.104	0.102	0.106	0. 103	0. 103	0. 105	0. 103	0.104	0.001	1.3
11/14/94	7:45 PM	0. 107	0.104	0.105	0.104	0.104	0.106	0. 106	0. 105	0. 103	0. 106	0. 105	0.001	1.2
11/14/91	8:15 PM	0.106	0. 105	0.105	0.107	0, 107	0. 105	0. 105	0, 107	0.108	0. 109	0.106	0.001	1.3
11/14/94	8:45 PH	0.104	0, 106	0.108	0.107	0.109	0. 106	0. 106	0. 105	0. 107	0. 105	0. 106	0.001	1.4
11/15/94	MA 00:8	0.108	0. 105	0.109	0.104	0. 106	0. 107	0.108	0. 107	0.107	0. 106	0. 107	0.001	1.4
11/15/94	8:30 AM	0. 105	0, 106	0.106	0.104	0.104	0.107	0, 107	0, 104	0.106	0. 104	0. 105	0.001	1.2
	9:00 AM	0. 107	0.104	0.106	0. 103	0. 105	0. 106	0.104	0. 105	0.104	0. 107	0.105	0.001	13
	9:30 AM	0.107	0.107	0.106	0.106	0. 106	0. 106	0. 107	0. 105	0.105	0. 107	0.106	0.001	0.7
11/15/94		0. 104	0.104	0.101	0.106	0. 106	0. 103	0.103	0. 103	0.104	0. 103	0.104	0.001	1.4
11/15/94	10:30 AM	0. 104	0.105	0.106	0. 105	0. 104	0. 106	0.104	0.106	0.105	0. 105	0.105	0.001	0.8
11/15/94		0. 107	0. 106	0.104	0.107	0.106	0. 105	0. 106	0. 105	0. 107	0. 106	0. 106	0.001	0.9
11/15/94		0. 104	0.105	0, 108	0.103	0. 107	0.106	0, 105	0.106	0.105	0.106	0.106	0.001	1.4
11/15/94	12:35 PM	0. 107	0.106	0.105	0.107	0.107	0.105	0.106	0. 104	0.104	0.105	0.106	0.001	1.1
11/15/94	1:05 PM	0.106	0.104	0.107	0.105	0. 107	0. 106	0.105	0. 104	0. 105	0. 106	0, 106	0.001	1.0
11/15/94	1:35 PH	0. 105	0, 106	0, 104	0.106	0.104	0. 109	0. 107	0.106	0.105	0. 105	0.106	0.001	1.2
11/15/94	1:30 PM	0. 105	0.108	0.107	0.100	0.106	0.104	0. 105	0. 107	0.107	0.104	0.106	0.002	1.4
11/15/94	5:00 PH	0. 105	0. 105	0.106	0. 107	0.108	0. 105	0. 105	0. 107	0.105	0. 105	0.106	0.001	1.1
11/15/94	5:30 PM	0. 107	0. 105	0.104	0. 106	0.101	0, 105	0.107	0.104	0.106	0.106	0. 105	0.001	1.1
11/15/94		0. 106	0.104	0. 105	0. 105	0. 107	0. 102	0. 107	0.106	0.104	0. 109	0.105	0.002	1.7
11/15/94	6:40 PM	0. 103	0. 104	0.106	0.104	0.106	0. 105	0. 102	0. 106	0. 106	0. 105	0. 105	0.001	1.4
11/15/94	7:10 PH	0. 103	0.105	0.103	0. 106	0. 103	0. 106	0. 105	0.105	0. 102	0.106	0. 104	0.002	1.1
11/15/94	7:10 PH	0.104	0. 105	0.105	0.105	0, 104	0. 103	0. 107	0.105	0.105	0. 107	0. 105	0.001	1.2
11/15/94		0. 104	0.105	0.104	0. 104	0. 106	0. 105	0. 104	0.106	0.101	0.104	0. 105	0.001	0.8
11/15/94	8:40 AM 9:10 AM	0. 106 0. 103	0.101	0. 105	0. 103	0. 102	0. 105	0. 104	0. 105	0. 103	0. 103	0. 104	0.001	1.2
11/10/91	3:10 HII	u. 103 [0.106	0.106	0. 104	0. 104	0. 105	0. 105	0. 103	0.104	0.107	0.105	0.001	1.3

Compression - Height (g) - Rear

Date	Tine	1	2	3	4	5	6	7	8	9	10	Average	St Dev.	I RSD
11/11/91	5:15 PM	0, 107	0.103	0.102	0.107	0. 103	0.108	0.105	0.101	0.105	0. 101	0.105	0.002	2.2
11/14/94	5:45 PH	0.104	0.105	0.102	0, 105	0. 105	0.105	0.101	0.103	0, 106	0. 105	0.104	0.002	1.5
11/14/94	6:15 PH	0. 106	0.102	0.100	0.105	0. 101	0. 105	0.104	0.106	0.106	0.104	0.104	0.002	2, 1
11/14/94	6:45 PM	0.101	0.100	0.101	0. 100	0, 100	0. 102	0. 104	0.102	0. 102	0.100	0. 102	0.002	1.6
11/11/94		0.104	0, 101	0.100	0.102	0. 101	0.104	0.104	0.100	0.100	0.101	0.102	0.002	17
11/14/94		0. 108	0.102	0.107	0.106	0.107	0.103	0.104	0. 104	0.104	0.105	0.105	0.002	1.9
11/14/94	8:15 PM	0. 108	0.104	0.107	0.108	0. 105	0. 104	0.106	0, 104	0.108	0.108	0.106	0.002	1.7
11/14/94	8:45 PM	0.108	0.106	0.107	0.104	0.108	0.106	0. 106	0. 105	0. 102	0.106	0. 106	0.002	1.7
11/15/94	8:00 AM	0. 107	0.105	0.107	0.104	0.107	0.108	0.110	0. 108	0.108	0.107	0.107	0.002	1.6
11/15/94	8:30 AM	0. 102	0.105	0. 102	0.104	0. 105	0.104	0.106	0.105	0.103	0. 102	0.104	0.001	1.4
11/15/94	9:00 AM	0. 106	0.104	0.101	0.106	0. 10 1	0. 102	0. 107	0. 107	0.103	0. 103	0.104	0.002	2.3
11/15/94	9:30 AM	0. 107	0.105	0.101	0.107	0. 104	0.102	0. 106	0.103	0.106	0.104	0.105	0.002	2.0
11/15/94		0. 105	0.103	0.105	0.104	0. 104	0. 105	0. 107	0. 103	0, 105	0.105	0.105	0.001	1.1
11/15/91		0. 103	0.102	0.106	0.105	0. 103	0.103	0, 106	0. 104	0. 106	0, 109	0. 105	0.002	2.0
	11:35 AM	0. 107	0.109	0.105	0.103	0. 103	0.104	0.103	D. 102	0.103	0.104	0. 104	0.002	1.9
11/15/91		0, 108	0.105	0.104	0.107	0.103	0. 107	0. 107	0. 106	0.106	0.104	0.106	0.002	1.5
11/15/91	12:35 PH		0.101	0.106	0.103	0. 107	0. 102	0. 106	0. 106	0.105	0. 106	0. 105	0.002	1.6
11/15/91	1:05 PM	0. 102	0.105	0.103	0.107	0. 101	0. 107	0. 105	0. 103	0.107	0.105	0. 105	0.002	2.1
11/15/94	1:35 PM	0. 105	0.106	0.106	0.105	0. 105	0. 106	0. 103	0. 102	0.102	0.106	0.105	0.002	1.6
11/15/94	1:30 PM	0. 106	0.104	0.106	0. 105	0.107	0. 107	0. 102	0. 107	0. 103	0.104	0, 105	0.002	1.7
11/15/94	5:00 PM	0.109	0.105	0.107	0, 107	0.106	0. 106	Q. 106	0.105	0.107	0. 103	0. 106	0.002	1.5
11/15/94	5:30 PH	0. 106	0.104	0.101	0. 106	0.104	0. 105	0. 107	0. 106	0. 106	0. 103	0. 105	0.001	1.2
11/15/94	6:10 PM	0. 104	0.104	0.107	0. 104	0.104	0. 103	0. 103	0. 103	0.106	0. 102	0.104	0.001	1.4
11/15/91	6:40 PH	0, 104	0.105	0. 103	0.104	0. 102	0.105	0. 101	0. 103	0, 105	0. 106	0.104	0.002	1.5
11/15/91	7:10 PH	0. 104	0.103	0.107	0. 100	0. 104	0. 102	0. 105	0. 104	0.105	0.104	0.104	0.002	1.8
11/15/94	7:40 PM	0. 106	0. 105	0. 105	0. 106	0. 106	0. 106	0. 104	0.104	0.106	0.106	0. 105	0.001	0.8
11/15/94	8:10 PM	0. 103	0. 103	0. 105	0. 105	0. 105	0.103	0. 103	0.102	0.106	0. 102	0.104	0.001	1.4
11/15/94	8:40 AH	0.105	0. 102	0. 106	0. 106	0. 106	0.104	0. 101	0.102	0. 103	0. 104	0.104	0.002	1.8
11/15/94	9:10 AM	0.101	0. 105	0.101	0.106	0. 106	0. 105	0.102	0.105	0.102	0.103	0. 104	0.002	1.9

PROCESS VALIDATION

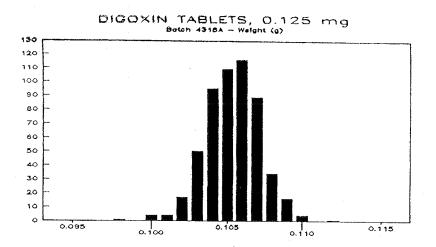
DIGOXIN TABLETS, 0.125 mg - Batch # 4322A

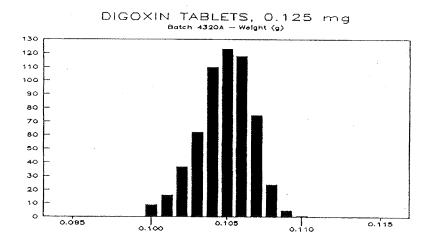
Compression - Height (g) - Front

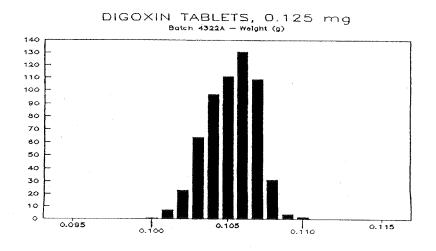
Oate	Tine	1	1 2	3	1 4	5	1 6	7		T ~	- 10	γ.		
11/16/94	12:15 PM	0. 104	0. 102	0.106	0, 106	0. 107	0. 105	0.105	8	9	10	Average		RSD
11/16/94	12:45 PM	0. 107	0. 105	0.105	0.106	0. 107	0. 103		0.107	0. 106	0.107	0.106	0.001	1.0
11/16/94	1:15 PM	0. 105	0. 107	0.105	0. 106	0. 106		0. 107	0. 107	0.104	0. 105	0.106	0.001	1.0
11/16/94	1:45 PH	0. 103	0. 105	0, 106	0.108	0. 106		0, 105	0. 105	0. 107	0. 107	0, 106	0.001	0.8
11/16/94	2:30 PM	0. 109	0. 106	0. 103	0. 107	0. 105	0.107	0.106	0.106	0.106	0.105	0.105	0.001	1.1
11/16/94	3:00 PH	0. 107	0. 104	0.104	0. 107	0. 105	0.104	0.105	0. 106	0.105	0. 105	0. 105	0.001	1.4
11/16/94	3:35 PH	0. 106	0. 107	0.106	0. 103	0. 105	0.105	0. 106	0. 105	0.106	0, 105	0.105	0.001	1.1
11/16/94	4:05 PH	0. 106	0. 104	0.107	0. 105	0. 105	0.107	0, 104	0. 104	0, 106	0, 106	0.106	0.001	1.1
11/16/94	1:35 PM	0. 108	0. 104	0.106	0. 105	0. 106	0. 106	0, 105	0. 105	0. 103	0.106	0. 105	0.001	1.1
11/16/94	5:05 PM	0. 105	0. 106	0.102			0.105	0.105	0. 104	0. 105	0. 107	0. 106	0.001	1.2
11/17/94	8:00 AM	0. 106	0. 106	0. 107	0. 105	0. 104	0. 106	0.104	0. 106	0. 104	0.105	0. 105	0.001	1.0
11/17/94	9:30 AM	0. 108	0. 108	0.106	0. 107	0. 107	0. 105	0. 106	0. 106	0. 107	0. 105	0.106	0.001	0.7
11/17/91	9:00 AM	0. 103	0. 105	0.104	0. 105	0. 107	0.104	0. 108	0. 107	0, 108	0. 107	0.107	0.001	1.3
11/17/94	9:30 AH	0. 105	0. 105		0. 105	0. 105	0. 106	D. 107	0. 103	0.104	0.107	0. 105	0.001	1.4
11/17/94	10:00 An	0. 103	0. 106	0.106	0.106	0. 105	0. 106	0. 105	0. 106	0. 105	0. 105	0. 105	0.001	0.5
11/17/94	10:30 AM	0. 102		0. 107	0. 107	0. 104	0.105	0.104	0. 104	0. 104	0. 103	0. 105	0.002	1.6
11/17/94	11:35 AM	0. 106	0. 105	0. 104	0. 104	0.101	0.106	0.100	0. 103	0. 106	0.105	0.104	0.002	1.7
11/17/94	12:05 PM		0. 104	0. 105	0. 106	0. 106	0, 107	0. 103	0. 106	0.104	0. 105	0. 105	0.001	1.2
11/17/94	12:05 PH	0. 104 0. 105	0. 103	0.103	0. 105	0.103	0, 103	0. 107	0. 106	0. 103	0. 106	0.104	0.002	1.5
11/17/94	1:45 PM	0. 103	0. 105	0.105	0. 106	0.108	0, 105	0.105	0. 104	0. 105	0, 107	0.106	0.001	1.1
11/17/94	2:35 PH	0. 105	0. 103	0.106	0. 107	0. 106	0.102	0. 109	0. 106	0. 104	0.102	0. 105	0.002	2.2
11/17/94	3:05 PM	0. 105	0. 106	0.105	0. 105	0. 108	0.105	0.105	0. 104	0. 104	0. 105	0. 105	0.001	1. 1
11/17/94	3:30 PH	0. 105	0. 103	0.106	0.106	0, 106	0.103	0.104	0. 107	0. 105	0. 105	0. 105	0.001	1.3
11/17/91	1:00 PH	0. 106	0. 106 0. 105	0.106	0. 103	0.106	0. 104	0. 104	0.104	0.107	0. 105	0. 105	0.001	1.2
11/17/94	1:30 PM	0. 107	0.103	0. 105 0. 108	0. 104 0. 107	0.105	0. 105	0.106	0. 104	0.106	0. 103	0.105	0.001	0.9
11/17/94	5:05 PH	0. 105	0. 105	0. 108		0. 107	0.106	0. 104	0. 108	0. 103	0. 106	0. 106	0.002	1.7
11/17/94	5:35 PM	0. 105	0. 103	0.103	0. 107 0. 106	0.106	0. 106	0. 105	0. 104	0. 107	0. 106	0. 106	0.001	1.0
11/17/94	6:25 PM	0. 104	0.106	0. 107	0. 105	0. 104	0.105	0. 106	0. 105	0. 105	0. 107	0.105	0.001	1.2
11/17/91	6:55 PH	0. 107	0. 104	0. 107	0. 107	0. 101	0. 105	0. 105	0. 104	0. 105	0. 105	0. 105	0.001	1.1
	2203 FIT	W. 407 1	0. 101 1	0. 103	0. 10/	ו רטו .ע	a. 103 J	0. 106	0.106	0. 104	0. 104	0. 105	0.001	1.3

Compression - Weight (g) - Rear

Date	Tine	1 1	2	3	T 4	5	6	1 3	1 0	-	76	γ	1	
11/16/94	12:15 PM	0. 107	0. 107	0, 104	0. 107	0, 105	0, 106		8	9	10	Average		RSD
11/16/94	12:45 PM	0. 107	0. 108	0.107	0. 107	0. 105	0. 104	0. 108	0. 107	0.104	0, 106	0. 106	0.001	1,3
11/16/94	1:15 PM	0. 101	0. 103	0.101	0. 107	0. 103		0. 106	0. 105	0. 103	0. 104	0. 106	0.002	1.6
11/16/94	1:45 PH	0. 104	0. 107	0.104	0. 104		0.104	0. 104	0. 107	0. 106	0. 104	0.105	0.002	1.5
11/16/94	2:30 PM	0. 106	0. 107	0.108		0. 106	0. 107	0.101	0.106	0. 106	0. 107	0. 106	0.001	1.2
11/15/91	3:00 PM	0. 107	0. 107		0. 107	0. 103	0.109	0. 106	0. 102	0. 105	0.104	0.106	0.002	2.1
11/16/94	3:35 PM	0. 107	0. 105	0.110	0.106	0. 107	0.105	0. 108	0. 107	0. 108	0, 103	0.106	0.002	2.1
11/16/91				0.106	0. 108	0.102	0.104	0. 102	0. 106	0.103	0. 108	0.105	0.002	2.2
11/16/94	4:05 PM	0. 101	0. 106	0.102	0. 107	0, 102	0.106	0. 104	0.108	0. 106	0. 105	0. 105	0.002	2.3
11/16/94	4:35 PM	0. 107	0.104	0.102	0. 101	0. 103	0.106	0. 105	0. 104	0. 103	0.102	0.101	0.002	1.6
11/17/94	5:05 PM 8:00 AM	0. 103	0.106	0.105	0. 104	0. 103	0.107	0. 103	0.106	0.106	0.105	0. 105	0.001	1.4
11/17/94		0. 106	0.108	0.106	0. 107	0. 108	0. 105	0. 107	0.110	0.109	0. 107	0. 107	0.001	1.4
11/17/94	8:30 AM 9:00 AM	0. 104	0. 107	0.103	0. 108	0. 107	0. 109	0. 104	0.106	0.108	0. 105	0.106	0.002	1.9
11/17/94	9:00 AM 9:30 AM	0. 105	0. 107	0, 106	0. 102	0. 103	0.104	0. 104	0.103	0.105	0.103	0.104	0.002	1.5
11/17/94		0. 102	0. 103	0.105	0. 107	0. 106	0. 107	0. 107	0. 106	0. 103	0.105	0. 105	0.002	1.8
	10:00 AM	0. 103	0. 107	0.107	0. 105	0. 107	0. 104	0. 106	0. 103	0.104	0. 107	0.105	0.002	1.6
11/17/94	10:30 AM	0.108	0. 102	0. 106	0. 107	0. 107	0.104	0, 103	0. 103	0. 103	0. 107	0.105	0.002	2.1
11/17/94	11:35 AM	0. 104	0. 106	0.106	0. 101	0. 108	0.102	0, 107	0.106	0.103	0. 103	0.105	0.002	2.2
11/17/94	12:05 PH	0. 107	0.106	0.104	0. 104	0. 107	0.104	0. 107	0. 107	0. 102	0.103	0.105	0.002	1.8
11/17/94	12:35 PM	0. 101	0. 107	0.102	0.102	0. 107	0. 10 1	0.105	0. 107	0. 102	0.105	0.104	0.003	2.5
11/17/94	1:45 PM	0.106	0, 107	0.103	0. 106	0.104	0.102	0.107	0, 106	0, 104	0. 103	0. 105	0.002	1.7
11/17/94	2:35 PM	0. 103	0. 103	0.105	0. 106	0.107	0.108	0. 105	0. 105	0.106	0. 107	0.106	0.002	1.6
11/17/94	3:05 PM	0. 106	0. 106	0.102	0. 101	0. 103	0. 104	0.105	0. 107	0. 103	0.106	0. 105	0.002	1.6
11/17/94	3:30 PM	0. 102	0. 104	0.105	0. 106	0. 107	0.105	0.107	0. 104	0.106	0. 106	0. 105	0.002	1.5
11/17/94	4:00 PM	0. 107	0. 103	0. 104	0. 104	0. 108	0.103	0. 107	0. 106	0. 105	0. 104	0. 105	0.002	1.7
11/17/94	4:30 PM	0. 106	0. 107	0. 103	0. 104	0. 104	0. 105	0, 104	0. 103	0. 106	0. 104	0. 105	0.001	1.3
11/17/94	5:05 PM	0. 105	0. 104	0. 107	0. 108	0. 106	0.104	0. 101	0. 108	0.106	0. 107	0. 106	0.002	2.1
11/17/94	5:35 PM	0. 103	0.106	0.103	0.106	0.107	0.102	0. 102	0. 104	0. 105	0.108	0. 105	0.002	2.0
11/17/94		0.101	0. 108	0.106	0. 107	0. 103	0. 107	0.108	0. 105	0. 107	0. 105	0. 106	0.002	2.1
11/17/94	6:55 PM	0. 103	0. 108	0.101	0.106	0. 107	0.104	0. 106	0. 106	0. 103	0. 106	0. 105	0.002	2.1







PROCESS VALIDATION

ŧ

DIGOXIN TABLETS, 0.125 mg - Betch # 4318A

Compression - Hardness (kp) - Front

Oate	Tine	1	2	3	4	5	Average	St Dev.	RSO
11/11/94	1:50 PM	1.2	3.8	5.0	1.5	1.5	1.1	0.1	10.0
11/11/94	2:45 PM	1.1	4.5	5.0	1.1	1.3	1.5	0.3	7.5
11/11/94	3:20 PH	1.1	1.6	1.6	1.6	1.7	1.6	0.1	2.4
11/11/94	1:00 PH	1.1	1.6	4.7	1.6	1.7	1.6	0.1	2.7
11/11/94	4:30 PM	5. 1	1.6	1.5	5.0	5. 2	1,9	0.3	6.1
11/12/94	7:25 AM	4.6	1.5	4.2	1.7	1.6	1.5	0.3	1, 3
11/12/94	7:55 AM	1.1	5.1	1.7	4.8	1.5	1.7	0.3	5.8
11/12/94	8:25 AM	4.4	4.5	4.2	5. 2	3.9	4, 4	0.5	10.9
11/12/94	8:55 AM	4.8	4.7	4.5	1.3	1.6	4.6	0.2	1.2
11/12/94	9:25 AM	4.6	4.3	4.8	1.3	1.5	1.5	0.2	1.7
11/12/94	9:55 AM	4.8	4.5	4.2	4.2	4.3	1.1	0.3	5,8
11/12/94	10:25 AM	4.8	4.9	4.5	1.1	1.1	1.6	0.2	5.1
11/12/94	11:50 AM	1.7	1.8	1.2	1.2	1.5	1.5	0.3	6.2
11/12/94	12:20 PM	5.0	1.1	4.8	1.2	1.7	1.6	0.3	6.9
11/12/94	12:50 PM	1.8	1.5	1.6	4.4	1.2	1.5	0.2	5.0
11/12/94	1:20 PM	4.7	1.6	4.9	1.1	1.1	4.5	0.3	6.7
11/12/94	1:50 PM	1.5	4.5	4.7	1.5	1.7	1.6	0.1	2.4
11/12/94	2:20 PH	1.4	1.6	4.4	5. 1	5.0	1.7	0.3	7.1
11/14/94	8:20 AM	4.0	3.9	3.7	4.3	1.1	1.0	0, 2	5, 6
11/14/94	8:45 AH	1.2	1.3	1.2	4.2	4.8	1.2	0.1	2.6
11/14/94	9:15 AM	4.3	1.2	4.4	4.3	1,6	4.4	0, 2	3.5
11/14/94	9:45 AM	4.4	1.0	3.9	1.1	1.1	1.2	0.2	5.9
11/14/94	10:15 AM	4.3	1.3	4.2	4.3	3.9	1 . 2	0.2	1.1.
11/14/94	10:45 AM	1.4	1.7	1.5	1.3	1.6	1.5	0.2	3.5
11/14/94	1:25 PH	3.9	4.4	4.0	1.1	1.3	4. 1	0.2	5.0
11/14/94	1:50 PH	4.0	4.9	1.2	4.3	1.3	4.3	0.3	7.7
11/14/94	2:45 PM	4.3	4.5	4.7	3.7	4.6	1.4	0.1	9. 1

Compression - Hardness (kp) - Rear

Date	Tine	1	2	3	4	5	Average	St Dev.	RSD
11/11/94	1:50 PM	1.5	3,6	4.3	1.6	1.2	1.2	0.4	9. 2
11/11/94	2:45 PH	1.3	3.7	1.5	1.6	1.6	1.3	0,4	8.7
11/11/94	3:20 PM	1.5	4.9	4.1	1.7	4.9	1.6	0.3	7.2
11/11/94	4:00 PM	1.8	3.9	4.4	4.0	5.0	4, 4	0.5	10.9
11/11/94	1:30 PM	4.5	4.0	4.2	1.5	1.6	4, 4	0.3	5.8
11/12/91	7:25 AM	4.7	5. 1	1.1	1.7	5. 1	4.9	0.4	8.0
11/12/94	7:55 AM	1.4	1.2	4.4	1.6	4.4	1.1	0.1	3. 2
11/12/94	8:25 AM	3.9	5.0	4.3	5.3	3.7	4.4	0.7	15.6
11/12/94	8:55 AM	4.5	5.3	4.1	5.0	4.7	4.7	0.5	9.8
11/12/94	9:25 AM	1.1	4.1	1.5	5.3	4.1	1 .5	0.5	11.0
11/12/94	9:55 AM	4.6	5.4	4, 4	1.6	5. 1	1.8	0.4	8.6
11/12/94	10:25 AM	1.6	5.0	4.7	1.1	3.8	1.4	0.5	10.9
11/12/94	11:50 AM	5.0	4, 1	4.3	1.2	1.7	1.5	0.4	8.5
11/12/94	12:20 PH	5. 1	5.0	4.3	4.2	1.2	4.6	0.5	11.9
11/12/94	12:50 PM	1.5	1.1	4.6	5.1	4.6	1.7	0.4	8.5
11/12/94	1:20 PH	5.0	1.5	5.0	1.6	4.4	4.7	0.3	6.0
11/12/94	1:50 PM	1.6	4.4	5.1	5.0	4.9	4.8	0.3	6.1
11/12/94	2:20 PM	5.2	1.4	4.2	4.4	5.0	1.6	0.4	9.3
11/14/94	8:20 AM	1. B	1.0	1.2	4.0	4.3	1.3	0.3	7.7
11/14/94	8:45 AM	4.0	1.5	4.0	4.0	4.4	1.2	0.2	6.0
11/14/94	9:15 AM	1.3	1.5	4.5	1.6	4.5	1.5	0.1	2.1
11/14/94	9:45 AM	4.8	4.6	1.6	1.6	1.5	1.6	0.1	2. 1
11/14/94	10:15 AM	4.2	1.5	4.7	1.9	1.3	1.5	0.3	6.3
11/14/94	10:45 AH	1.1	1.1	4.2	1.2	3.9	1.2	0.2	1.1
11/14/94	1:25 PM	4.4	1.2	3.8	1.2	4.3	4. 2	0.2	5.5
11/14/94	1:50 PM	4.5	4.1	4.7	1.9	1.2	1.5	0.3	7.5
11/14/94	2:45 PM	3.7	4.7	3.6	4.4	4.4	4.2	0.5	11.6

PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg - Batch # 4320A

Compression - Hardness (kp) - Front

Date	Tine	1	2	3	4	5	Average	St Dev.	RSO
11/11/94	5:15 PM	4.4	4.7	4.8	1.1	1,1	4.5	0.2	1.3
11/14/94	5:45 PH	1.6	4.1	1.7	4.3	1.3	4.4	0.2	5.6
11/14/94	6:15 PH	1.6	5.0	1.5	4.9	1.3	1.7	0.3	6.2
11/14/94	6:45 PH	1.2	1.3	4.5	4.2	1.2	1.3	0.1	3.0
11/14/94	7:15 PH	4.3	1.6	1.0	1.2	1.6	1.3	0.3	6.0
11/14/94	7:45 PM	5.2	4.5	4.2	5.0	1,6	1.7	0.4	8.5
11/14/94	8:15 PM	4.7	1.6	5.0	1.2	4.8	1.7	0.3	6.4
11/14/94	8:45 PM	5.3	1.8	1.7	5.7	4.5	5.0	0.5	9.8
11/15/94	8:00 AM	4.5	1.6	1.3	4.3	1.7	1.5	0.2	1.0
11/15/94	8:30 AM	4.6	1.3	4.4	4.8	4.3	4.5	0.2	1. B
11/15/94	9:00 AM	1.7	1.5	1.4	4.3	1.4	1.5	0.2	3.4
11/15/94	9:30 AM	1.5	1.8	1.5	4.5	1.5	1.6	0.1	2.9
11/15/94	10:00 AM	4.6	1.2	1.6	5.0	1.3	1.5	0.3	6.9
11/15/94	10:30 AM	1.2	4.9	1.8	5.1	4.8	1.B	0.3	7.1
11/15/94	11:35 AM	1.1	4.9	4.2	1.1	4.6	4.5	0.3	5.9
11/15/94	12:05 PM	4.2	4.3	4.2	4.8	1.5	4,4	0.3	5.8
11/15/94	12:35 PM	4.0	4.7	1.2	4.2	3.9	1. 2	0.3	7.3
11/15/94	1:05 PM	4.6	1.6	1.5	4. 1	4.8	1.6	0.1	3.2
11/15/94	1:35 PM	1,1	4.6	4.7	5,3	4.9	1.8	0.3	7.2
11/15/91	4:30 PM	1.7	4.3	1.3	5.0	1.5	4.6	0.3	6.5
11/15/94	5:00 PM	1.3	4.4	4.8	1.3	1.3	4.4	0.2	1.9
11/15/94	5:30 PM	4.7	4.5	5.2	4.5	1.8	1.7	0.3	6.1
11/15/94	6:10 PM	1.7	4.2	4.4	1.8	1.8	1.6	0.3	5.9
11/15/94	6:40 PM	1.5	1.3	1.1	4.8	1.3	1.5	0.2	1.6
11/15/94	7:10 PM	1.6	1.1	4.7	1.1	1, 3	1.5	0.2	3.7
11/15/94	7:40 PM	1.8	4.3	4.8	4.3	1.4	4.5	0.3	5.7
11/15/94	9:10 PM	4.7	1.2	1.0	1.5	1.1	1.1	0.3	6.2
11/15/94	8:40 PH	1.7	5.2	4.4	5.0	1.6	1.8	0.3	6.7
11/15/94	9:10 PH	4.8	4.6	5.1	4.1	1.5	1.6	0.4	8.0

Compression - Hardness (kp) - Rear

Date	Tine	1	2	3	1	5	Average	St Dev.	RSD
11/14/94	5:15 PM	3,9	3.9	3.7	1.1	1.7	4.1	0.4	10.1
11/14/94	5:45 PM	1.1	4.2	1.9	4.6	4.1	1.1	0.1	8.1
11/14/94	6:15 PM	4.3	1.6	3.9	4.7	3.4	1.2	0.5	12.8
11/14/94	6:45 PM	1.1	3.9	3.7	4.0	4.1	1,0	0.2	1.2
11/14/94	7:15 PM	1.7	4.8	3.9	4.6	1,2	4.3	0.4	8.3
11/14/94	7:45 PM	4.8	4.4	4.5	4.7	1.7	1.6	0.2	3.6
11/14/94	8:15 PM	5.4	5.8	1.3	5.6	1.9	5.2	0.6	11.6
11/14/94	8:45 PM	5.3	5.4	1.3	4.9	4.8	1.9	0.4	8.9
11/15/94	8:00 AM	4.2	3,7	1.1	1,8	1.9	4.4	0.5	11.0
11/15/94	8:30 AM	3.7	3.9	3.8	3.9	4.9	1.0	0.5	12. 1
11/15/94	9:00 AM	4.8	4.2	3.9	1.5	1.8	1.1	0.4	8.8
11/15/94	9:30 AM	1.1	1.6	4.7	1.9	1.0	1.5	0.4	8.8
11/15/91	10:00 AM	4.5	1,2	1.2	1.2	1,1	4,2	0.2	3.6
11/15/94	10:30 AM	1.6	1.7	1.9	5,0	1.5	4.7	0.2	1.4
11/15/94	11:35 AH	3.7	4.1	4.7	4.1	4.6	1.2	0.4	9.7
11/15/94	12:05 PM	4.8	4.4	4.8	4.3	3.9	4.4	0.1	8.5
11/15/94	12:35 PM	4.0	1,5	4.1	4.7	5.0	1.5	0.4	9.3
11/15/94	1:05 PM	4.3	1.5	4.8	4.4	4.7	4.5	0.2	1.6
11/15/94	1:35 PM	4.7	4.7	1.0	1.6	1.7	4.5	0.3	6.7
11/15/94	4:30 PM	1.2	1.1	4.7	4.3	4.2	4.3	0.2	5.5
11/15/94	5:00 PM	1.8	4.7	5.2	1.6	1.9	4.0	0.2	1.8
11/15/94	5:30 PM	5.1	1.3	1.5	4.1	4.7	1.5	0.4	8.5
11/15/94	6:10 PM	4.4	4.9	1.6	4.4	4.4	4.5	0.2	4.8
11/15/94	6:40 PH	4.7	5.1	4.8	4.1	4.2	4.6	0.1	9.2
11/15/94	7:10 PH	3.9	4.8	1.6	3.7	5.0	4.4	0.6	13.0
11/15/94	7:10 PH	4.8	1.1	1.7	4.7	5.2	4.8	0.3	6.1
11/15/94	8:10 PM	1.9	1.1	4.0	1.7	4.5	1.5	0.3	7.5
11/15/94	8:40 PM	5.2	4.1	4.6	4.5	5.2	4.7	0.5	10.1
11/15/94	9:10 PH	1.0	1.0	1.5	5.2	4.7	1.5	0.5	11.3

PROCESS VALIDATION

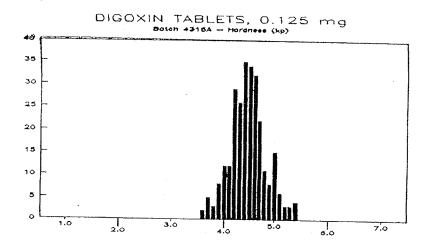
DIGOXIN TABLETS, 0.125 mg - Batch # 4322A

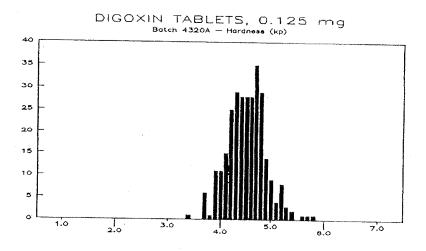
Compression - Hardness (kp) - Front

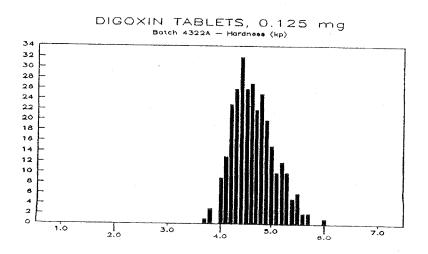
Date	Tine	1	2	3	1	5	Average	St Dev.	RSO
11/16/94	12:15 PM	1.8	1.8	1.5	1.9	1.1	1.7	0.2	1.6
11/16/94	12:45 PH	4.6	1.8	1.3	1,3	4, 4	4.5	0.2	4.8
11/16/94	1:15 PM	4.7	4.3	4.8	4.5	4.2	4.5	0.3	5.7
11/16/94	1:45 PH	1.2	1.7	1.1	4.9	1.7	1.6	0.3	6.1
11/16/94	2:30 PM	1.5	5.3	1.7	1.5	5. 2	4.8	0.4	7.9
11/16/94	3:00 PM	1.6	4.6	4.3	1.6	5.2	1.7	0.3	7.1
11/16/94	3:35 PM	1.2	4.5	5. 2	4.8	1.7	4.7	0.4	7.9
11/16/94	4:05 PH	4.7	1.8	4, 4	4.7	5.1	1.7	0.3	5.3
11/16/94	1:35 PH	4,5	4.8	4.5	4.4	1.5	4.5	0.2	3.3
11/16/94	5:05 PH	1.6	1.8	5.0	1.0	4.9	1.7	0.4	8.5
11/17/94	8:00 AM	4.2	4.4	4.3	4.5	4.3	4.3	0.1	2.6
11/17/94	8:30 AH	1.5	4.9	1.3	4.8	4.4	4.6	0.3	5.7
11/17/94	9:00 AM	4.1	4.4	1.5	1.3	4.4	4.3	0.2	3.5
11/17/94	9:30 AH	4.8	1.6	4.6	4.4	4.9	4.7	0.2	1,2
11/17/94	10:00 AM	1.1	1.1	4.0	1.7	4.6	4.4	0.3	7.0
11/17/94	10:30 AM	1.6	4.6	4.9	1.0	1.3	4.5	0.3	7.6
11/17/94	11:35 AM	4.1	1.6	1.1	4.8	5.3	4.7	0.4	8.0
11/17/91	12:05 PM	1.1	1.0	1.7	1.5	4.1	4.3	0.3	7.1
11/17/91	12:35 PM	1,6	1.2	1.2	4.2	5.0	4.4	0.1	8.1
11/17/91	1:45 PH	1.0	5.3	5. 4	5.3	1.3	1.9	0.7	13.5
11/17/94	2:35 PM	4.1	1.3	1.2	1.2	1.6.	1.3	0.2	1.5
11/17/94	3:05 PM	4.0	1.3	4.9	1.5	4.1	1.1	0.1	8.2
11/17/91	3:30 PH	1.2	1.2	4.2	1.3	1.0	1.2	0.1	2.6
11/17/91	1:00 PH	4.1	1.2	1.3	4.4	1.5	1.3	0.2	3.7
11/17/94	1:30 PM	5.0	1.1	5.0	4.7	1.8	1.8	0.2	5. 2
11/17/94	5:05 PM	1.1	1.5	1.5	1.2	4.9	1.5	0.3	5, 7
11/17/91	5:35 PH	1.9		1.1	1.4	4.5	1.5	0.3	6.5
11/17/94	6:25 PM	4.0	5. 1	4.5	4.9	1.1	1.6	0.1	9.4
11/17/94	6:55 PH	4.8	4.3	4.5	1.8	5.3	1.7	0.4	8.0

Compression - Hardness (kp) - Rear

Date	Tine	1	2	3	4	5	Average	St Dev.	RSD
11/16/94	12:15 PM	1.8	5.0	5, 3	4.3	5, 5	5.0	0.5	9.4
11/16/94	12:45 PH	1.1	1.8	4.7	1.7	4.6	4.6	0.2	3.3
11/16/94	1:15 PH	4.7	5.6	1.7	4.5	1.5	4.8	0.5	9.5
11/16/94	1:45 PH	5.4	1.9	5. D	5, 2	5.2	5.1	0.2	3.8
11/16/94	2:30 PM	4.6	5.6	5.3	5. 1	4.4	5.0	0.5	9.9
11/16/94	3:00 PH	5, 3	4.9	4.4	5.7	1.7	5.0	0.5	10.2
11/16/94	3:35 PH	4.7	4.9	1.6	5. 1	1.5	1.8	0.2	5. 1
11/16/94	1:05 PM	5.2	4.4	5, 2	5.0	1.6	1.9	0.1	7,1
11/16/94	1:35 PM	4.3	4.9	1.7	5.2	1.8	4.8	0.3	6.8
11/16/94	5:05 PM	5.1	4.7	5.5	5.0	5. 2	5.1	0.3	5.7
11/17/94	8:00 AM	4.1	5.4	6.0	5.3	5.5	5.3	0.7	13.3
11/17/94	8:30 AH	1.6	4.3	1.7	5.7	1,9	1.8	0.5	10.9
11/17/94	9:00 AM	4.9	5.3	1.3	1.3	1.1	1.6	0.5	11.0
11/17/94	9:30 AM	5.1	4.9	1.8	1.6	1.9	4.9	0.2	3.7
11/17/94	10:00 AM	4.1	4.4	1.2	4.8	5. 1	1.6	0.5	11.6
11/17/94	10:30 AM	1.3	5.2	1.2	4.7	4.8	1.6	0.4	8.7
11/17/94	11:35 AM	5.0	5.0	1.1	5.5	1.6	1.B	0.5	10.8
11/17/94	12:05 Pm	5.2	1.1	1.8	1.2	4.3	1.6	0.1	9. 1
11/17/94	12:35 PH	4.7	3.7	1.5	3.8	5.0	4.3	0.6	13. 1
11/17/94	1:45 PM	4.1	1.6	1.2	4.3	1.5	1.3	0.2	1.8
11/17/94	2:35 PM	1.9	1.2	5.0	5.2	4.3	1.7	0.4	9.4
11/17/94	3:05 PM	3.8	5.1	3.8	4.8	1.6	1.1	0.6	13.4
11/17/94	3:30 PM	4.4	1.2	1.3	5. 1	4.2	1.5	0.5	11.3
11/17/94	1:00 PH	1.6	4.3	1.1	1.2	4.8	4.5	0.2	5, 4
11/17/94	1:30 PM	4.8	4.5	4.7	5.0	1.1	1.7	0.2	5. 1
11/17/94	5:05 PH	5.1	5. 1	4.6	5. 1	4.9	5.0	0.2	1.4
11/17/94	5:35 PM	4.6	5.0	4.4	4.4	4.6	4.6	0.2	5.3
11/17/94	6:25 PH	4.5	4.4	4.6	4.2	5.0	1.5	0.3	6.5
11/17/94	6:55 PM	1.1	5.5	1.0	1.8	5.5	4.8	0.7	13.8







PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg - Batch # 4318A

Compression - Thickness (mm) - Front

Date	Tine	1	2	3	1	5	Average	St Dev.	RSO
11/11/94	1:50 PM	2.66	2.66	2.65	2.62	2.65	2.65	0.02	0.6
11/11/94	2:45 PM	2.62	2.62	2.63	2.64	2,60	2.62	0.02	
11/11/94	3:20 PH	2.67	2.65	2.63	2.61	2.65	2.65	0.01	0.6
11/11/94	4:00 PM	2.61	2.63	2.68	2.64	2.59	2.63	0.03	0.6
11/11/94	4:30 PM	2.66	2.64	2.64	2.64	2.63	2.64	0.01	1.3
11/12/94	7:25 AM	2.60	2.68	2.68	2.67	2.66	2.66	0.03	
11/12/94	7:55 AM	2.71	2.70	2.69	2.70	2.65	2.69	0.03	1.3 0.9
11/12/94	8:25 AM	2.61	2.64	2.66	2.62	2.66	2.61	0.02	
11/12/94	8:55 AM	2.66	2.68	2.63	2.63	2.61	2.61	0.02	0.6
11/12/94	9:25 AM	2.63	2.65	2.65	2.65	2.61	2.61	0.03	1.1
11/12/94	9:55 AM	2.68	2.66	2.61	2.63	2.63	2.64	0.03	0.3
11/12/94	10:25 AM	2.63	2.67	2.61	2.67	2.63	2.61	0.03	1.0
11/12/94	11:50 AM	2.66	2.60	2.67	2.63	2.65	2.61	0.03	1.1
11/12/94	12:20 PM	2.63	2.59	2.59	2.62	2.67	2.62	0.03	1. 3
11/12/94	12:50 PM	2.63	2.66	2.62	2.61	2.64	2.63	0.02	0.7
11/12/94	1:20 PH	2.62	2.61	2.61	2.65	2.61	2.62	0.02	0.7
11/12/94	1:50 PM	2.61	2.61	2.62	2.59	2.63	2.62	0.02	0.7
11/12/94	2:20 PH	2,60	2.60	2.63	2.64	2.60	2.61	0.02	0.7
11/14/94	8:20 AM	2,62	2,61	2.67	2.63	2.63	2,63	0.02	0.9
11/14/94	8:45 AM	2.64	2.62	2.63	2.60	2.65	2.63	0.02	0.7
11/14/94	9:15 AM	2.61	2.65	2.65	2.63	2.65	2.64	0.02	0.7
11/14/94	9:45 AM	2.61	2.61	2.59	2.63	2.62-	2.62	0.02	0.7
11/14/94	10:15 AM	2.64	2.62	2.63	2.62	2.63	2.63	0.01	0.3
11/14/94	10:45 AM	2,59	2.66	2.63	2.63	2.63	2.63	0.02	0.9
11/14/94	1:25 PM	2.61	2.66	2.61	2.64	2.61	2.63	0.02	0.9
11/11/91	1:50 PM	2.61	2.62	2.61	2.58	2.59	2.61	0.02	0.9
11/14/94	2:45 PM	2.64	2.65	2.59	2.63	2.63	2.63	0.02	0.9

Compression - Thickness (nm) - Rear

Date	Tine	1	2	3	4	5	Average	St Dev.	RSD
11/11/94	1:50 PM	2,57	2.59	2.63	2.62	2.64	2.61	0.03	1.1
11/11/94	2:45 PM	2.58	2.63	2.59	2.64	2.63	2.61	0.03	1.0
11/11/94	3:20 PH	2.61	2.60	2.64	2.63	2.64	2,62	0.02	0.7
11/11/94	1:00 PM	2.61	2.65	2.61	2.62	2.58	2.61	0.03	1.0
11/11/94	1:30 PM	2.62	2.65	2.55	2.65	2.62	2.62	0.01	1.6
11/12/94	7:25 AM	2.66	2.64	2.65	2.67	2.68	2,66	0.02	0.6
11/12/94	7:55 AM	2.60	2.65	2.66	2.66	2.63	2.61	0.03	1.0
11/12/94	9:25 AM	2.65	2.64	2.59	2.68	2.60	2.63	0.01	1.4
11/12/94	8:55 AM	2.67	2.66	2.66	2.68	2.65	2.66	0.01	0.4
11/12/94	9:25 AM	2.64	2.58	2.61	2.61	2.59	2.61	0.02	0.9
11/12/94	9:55 AM	2.62	2.66	2.68	2.66	2.62	2.65	0.03	1.0
11/12/94	10:25 AM	2.59	2.60	2.65	2.63	2.61	2.62	0.03	1.0
11/12/94	11:50 AM	2.68	2.63	2.66	2.62	2.66	2.65	0.02	0.9
11/12/94	12:20 PM	2.60	2.63	2.65	2.63	2.65	2.63	0.02	0.8
11/12/94	12:50 PM	2.64	2.61	2.67	2.62	2.61	2.63	0.03	1.0
11/12/94	1:20 PM	2.62	2.63	2.63	2.61	2.68	2.63	0.03	1.0
11/12/94	1:50 PM	2.61	2.62	2.63	2.65	2.65	2.64	0.01	0.5
11/12/94	2:20 PM	2.63	2.60	2.59	2.63	2.64	2.62	0.02	0.8
11/14/94	8:20 AM	2.64	2.63	2.61	2.65	2.66	2.64	0.02	0.7
11/14/94	8:45 AM	2.61	2.64	2.59	2.63	2.62	2.62	0.02	0.7
11/14/94	9:15 AM	2.63	2.63	2.64	2.59	2.65	2,63	0,02	0.9
11/14/94	9:45 AM	2.63	2.66	2.63	2.63	2.64	2.64	0.01	0.5
11/14/94	10:15 AM	2.60	2.61	2.63	2.57	2.60	2.60	0.02	0.8
11/11/91	10:45 AM	2.60	2.57	2.60	2.58	2.57	2.58	0.02	0.6
11/11/91	1:25 PM	2.64	2.61	2.62	2,60	2.65	2.62	0.02	0.8
11/14/94	1:50 PM	2.60	2.69	2.64	2.63	2.61	2.63	0.01	1.3
11/14/94	2:45 PM	2.66	2.58	2.63	2.62	2.58	2.61	0.03	1.3



PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg - Batch # 4320A

Compression - Thickness (nn) - Front

Date	Tine	i	2	3	1	5	Average	St Dev.	RSD
11/11/94	5:15 PH	2.62	2.65	2.66	2.68	2.65	2.65	0.02	0.8
11/14/94	5:45 PM	2.61	2.60	2.64	2.61	2.61	2.63	0.02	0.7
11/14/94	6:15 PM	2.67	2.61	2.61	2.66	2.63	2.61	0.03	1.1
11/11/91	6:45 PM	2.66	2.59	2.62	2.59	2.60	2.61	0.03	1.1
11/14/94	7:15 PM	2.62	2.61	2.58	2.61	2.64	2.61	0.02	0.8
11/14/94	7:45 PH	2.62	2.62	2.61	2.65	2.62	2.63	0.01	0.5
11/11/91	8:15 PM	2.63	2.66	2.61	2.66	2.69	2.66	0.02	0.9
11/11/91	9:45 PM	2.61	2.68	2.69	2.63	2.63	2.65	0.03	11
11/15/94	8:00 AM	2.66	2.68	2.67	2.68	2.65	2.67	0.01	0.5
11/15/94	8:30 AM	2.65	2.65	2.61	2.64	2.67	2.64	0.02	0.8
11/15/94	9:00 AM	2.64	2,60	2.61	2.63	2.64	2,62	0.02	0.7
11/15/94	9:30 AM	2.65	2, 65	2.63	2.67	2.60	2.64	0.03	1.0
11/15/94	10:00 AM	2.58	2.58	2, 59	2.61	2.60	2.59	0.01	0.5
11/15/94	10:30 AM	2.64	. 2.64	2.62	2.64	2.63	2.63	0.01	0.3
11/15/94	11:35 AM	2.62	2.62	2.65	2.64	2.68	2,61	0.02	0.9
11/15/94	12:05 PH	2.62	2.62	2.63	2.60	2.60	2.61	0.01	0.5
11/15/94	12:35 PM	2.63	2.62	2.62	2.62	2.66	2.63	0.02	0.7
11/15/94	1:05 PH	2.61	2.61	2,62	2.64	2.64	2,62	0.02	0.6
11/15/94	1:35 PH	2.63	2,64	2.65	2.64	2.61	2.63	0.02	0.6
11/15/94	1:30 PM	2.61	2.67	2.65	2.63	2.64	2.65	0.02	0.6
11/15/94	5:00 PM	2.64	2.66	2.63	2.66	2.64	2.65	0.01	0.5
11/15/91	5:30 PM	2.62	2.62	2.63	2.61	2.62	2.63	0.01	0.3
11/15/94	6:10 PM	2.60	2.63	2.62	2.63	2.66	2.63	0.02	0.8
11/15/94	6:40 PM	2.61	2.60	2.63	2.64	2.63	2.62	0.02	0.6
11/15/94	7:10 PM	2, 63	2.60	2.60	2.63	2.59	2.61	0.02	0.7
11/15/91	7:40 PH	2.65	2.63	2.61	2.65	2.65	2.61	0.02	0.7
11/15/91	8:10 PM	2.59	2.62	2.61	2.60	2.59	2.60	0.01	0.5
11/15/91	8:40 PM	2.62	2.63	2.56	2.62	2.60	2.61	0.03	1, 1
11/15/94	9:10 AM	2.62	2.61	2.59	2.61	2.63	2.62	0.02	0.7

Compression - Thickness (nm) - Rear

Date	Tine	1	2	3	4	5	Average	St Dev.	RSD
11/14/94	5:15 PH	2.61	2.62	2.67	2.58	2.58	2.61	0.01	1, 1
11/14/94	5:45 PM	2.61	2.61	2.63	2.63	2.61	2.62	0.01	0.5
11/14/94	6:15 PM	2.56	2.65	2.61	2.61	2.55	2.60	0.05	1.7
11/11/94	6:45 PM	2.54	2.57	2.56	2, 59	2.59	2.57	0.02	0.8
11/14/94	7:15 PH	2.60	2,59	2,55	2.58	2.60	2.58	0.02	0.8
11/14/94	7:45 PH	2.66	2.63	2.65	2.61	2.60	2.63	0.03	1.0
11/14/94	8:15 PM	2.60	2.66	2.69	2.65	2.67	2.65	0.03	1.3
11/14/94	8:45 PH	2.67	2.66	2.62	2.61	2.60	2.64	0.03	1:1
11/15/94	8:00 AM	2.61	2.61	2.62	2.68	2.66	2.64	0.03	1.1
11/15/94	8:30 AM	2.59	2.63	2.58	2.61	2.57	2.60	0.02	0.9
11/15/94	9:00 AM	2.56	2.63	2.62	2.63	2.60	2.61	0.03	1.1
11/15/91	9:30 AM	2.61	2.63	2.57	2.61	2.63	2.61	0.02	0.9
11/15/91	10:00 AM	2.63	2.61	2.63	2.65	2.59	2.62	0.02	0.9
11/15/94	10:30 AM	2.62	2.67	2.59	2.61	2.60	2.62	0.03	1, 2
11/15/94	11:35 AM	2.63	2.64	2.59	2.57	2.58	2.60	0.03	1.2
11/15/94	12:05 PM	2.66	2.60	2.61	2.66	2.65	2.61	0.03	1.1
11/15/94	12:35 PM	2.62	2.59	2.61	2.64	2.58	2.61	0.02	0.9
11/15/94	1:05 PM	2.63	2.62	2.56	2,59	2.61	2.60	0.03	1.1
11/15/94	1:35 PH	2.58	2.62	2.62	2.65	2.65	2.62	0.03	1.1
11/15/94	4:30 PH	2.59	2.61	2.65	2.61	2.62	2.62	0.02	0.9
11/15/94	5:00 PM	2.63	2.63	2.65	2.62	2.64	2.63	0.01	0.4
11/15/94	5:30 PM	2.57	2.60	2.61	2.60	2.61	2.60	0.03	1.0
11/15/94	6:10 PM	2.63	2.61	2.57	2.59	2.59	2.60	0.02	0.9
11/15/94	6:40 PM	2.61	2.60	2.62	2.59	2.61	2.61	0.01	0.4
11/15/94	7:10 PM	2.62	2.55	2.55	2.60	2.57	2.58	0.03	1.2
11/15/94	7:10 PH	2.65	2.62	2.61	2.62	2.61	2.63	0.02	0.6
11/15/94	8:10 PM	2.60	2.61	2.58	2.57	2.62	2.60	0.02	0.8
11/15/94	8:40 PM	2.55	2,59	2.61	2.61	2.60	2.59	0.02	1.0
11/15/94	9:10 AH	2.60	2.56	2.55	2.58	2.55	2.57	0.02	0.8

PROCESS VALIDATION

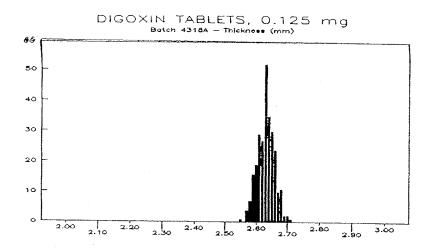
DIGOXIN TABLETS, 0.125 mg - Batch # 4322A

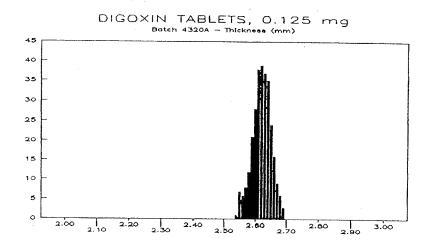
Compression - Thickness (nn) - Front

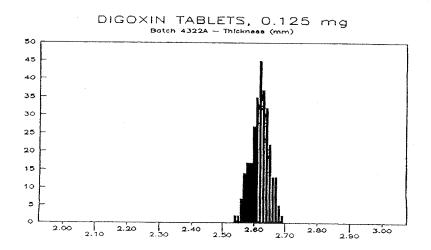
Date	Tine	1	2	3	4	5	Average	St Dev.	RSO
11/16/94	12:15 PH	2.64	2.64	2.69	2.61	2.66	2.65	0.02	0.8
11/16/94	12:45 PM	2.64	2.63	2.66	2.63	2.67	2.65	0.02	0.7
11/16/94	1:15 PM	2.67	2.64	2.62	2.65	2.65	2.65	0.02	0.7
11/16/94	1:45 PM	2.61	2.62	2.63	2.67	2.62	2.63	0.02	0.9
11/16/94	2:30 PM	2.64	2.64	2.62	2.58	2.63	2.62	0.02	0.9
11/16/94	3:00 PH	2.63	2.60	2.62	2.63	2.62	2.62	0.01	0.5
11/16/94	3:35 PM	2.61	2.64	2.64	2.63	2.64	2.63	0.01	0.5
11/16/94	4:05 PM	2.65	2.63	2.67	2.65	2.61	2.64	0.02	0.9
11/16/94	1:35 PH	2.65	2.63	2.64	2.62	2.65	2.61	0.01	0.5
11/16/94	5:05 PM	2.63	2.60	2.62	2.62	2.61	2.62	0.01	0.1
11/17/91	8:00 AM	2.64	2.67	2.66	2.64	2.69	2.66	0.02	0.8
11/17/94	8:30 AM	2.67	2.67	2.63	2.67	2, 65	2.66	0,02	0.7
11/17/94	9:00 AN	2.63	2.64	2.62	2.63	2.60	2.62	0.02	0.6
11/17/94	9:30 AM	2.62	2.61	2.63	2.61	2.62	2.62	0.01	0.3
11/17/94	MA 00:01	2.57	2.59	2.63	2.63	2.61	2.61	0.03	1.0
11/17/94	10:30 AM	2.62	2.60	2.62	2,62	2.61	2.61	0.01	0.3
11/17/94	11:35 AH	2.64	2.59	2.64	2.61	2.64	2.62	0.02	0.9
11/17/94	12:05 PM	2.61	2, 59	2,62	2.59	2.58	2.60	0.02	0.6
11/17/94	12:35 PM	2.62	2.61	2,65	2.61	2.63	2, 62	0.02	0.6
11/17/94	1:45 PM	2.63	2.63	2,68	2.64	2.57	2, 63	0.04	1.5
11/17/94	2:35 PM	2.66	2.60	2.62	2.62	2.61	2, 62	0.02	0.9
11/17/94	3:05 PM	2.65	2.60	2.62	2.59	2,60	2.61	0.02	0.9
11/17/94	3:30 PM	2.60	2.62	2,62	2.62	2.61	2.61	0.01	0.3
11/17/94	4:00 PM	2.61	2.62	2.60	2.60	2,59	2.60	0.01	0.4
11/17/94	4:30 PM	2.64	2.65	2.61	2.59	2.66	2.63	0.03	1.1
11/17/94	5:05 PH	2.60	2.62	2.63	2.61	2.61	2.61	0.01	0.4
11/17/94	5:35 PH	2.62	2.63	2.61	2.59	2.61	2.62	0.02	0.7
11/17/94	6:25 PH	2.63	2.66	2.60	2.66	2.61	2.63	0.03	1.1
11/17/94	6:55 PM	2.64	2,66	2.62	2.62	2.67	2.64	0.02	0.9

Conpression - Thickness (nn) - Rear

Date	Tine	1	2	3	4	5	Average	St Dev.	RSD
11/16/94	12:15 PM	2.65	2.67	2.63	2.66	2.63	2.65	0.02	. 0.7
11/16/94	12:45 PM	2.65	2.63	2.63	2,60	2.60	2.62	0.02	0.8
11/16/94	1:15 PM	2.58	2.65	2.66	2.59	2.61	2.62	0.04	1.4
11/16/94	1:45 PM	2.65	2.60	2.65	2.66	2.64	2,64	0.02	0.3
11/16/94	2:30 PM	2.61	2.63	2.63	2.58	2.55	2.60	0.03	1.3
11/16/94	3:00 PM	2.63	2.58	2.65	2.61	2,62	2.62	0.03	1,0
11/16/94	3:35 PM	2.65	2.59	2.58	2.60	2.61	2.61	0.03	1.0
11/16/94	1:05 PH	2.60	2.63	2.58	2.62	2.67	2.62	0.03	1.3
11/16/94	4:35 PM	2.60	2.56	2.58	2.63	2.61	2.60	0.03	1.0
11/16/94	5:05 PM	2.63	2.60	2,62	2,58	2.65	2.62	0.03	1.0
11/17/94	8:00 AM	2.68	2.67	2.65	2.66	2.62	2.66	0.02	0.9
11/17/94	8:30 AM	2.61	2.61	2.68	2.68	2.67	2.66	0.03	1. 1
11/17/94	9:00 AM	2,62	2,57	2.57	2.63	2,60	2.60	0.03	1.1
11/17/94	9:30 AM	2.63	2.61	2, 62	2.64	2.57	2,61	0.03	1.0
11/17/94	10:00 AM	2.59	2.59	2.64	2.64	2.57	2.61	0.03	1.2
11/17/94	10:30 AM	2,57	2.62	2,61	2.57	2.61	2.60	0.02	0.9
11/17/94	11:35 AM	2.58	2,62	2.62	2.56	2,57	2.59	0, 03	1. 1
11/17/94	12:05 PM	2.57	2.56	2.61	2.56	2.63	2.59	0.03	1.2
11/17/94	12:35 PM	2.62	2.54	2.58	2.51	2.62	2.58	0.04	1.6
11/17/94	1:45 PH	2,65	2, 60	2.64	2.64	2.61	2, 63	0.02	0.8
11/17/94	2:35 PM	2.60	2,65	2.58	2,60	2.65	2.62	0.03	1.2
11/17/94	3:05 PM	2,58	2.62	2.59	2.61	2.56	2.59	0.02	0.9
11/17/94	3:30 PH	2.62	2.64	2.60	2,59	2.56	2.60	0.03	1.2
11/17/94	4:00 PM	2.62	2.58	2.56	2.58	2.64	2.60	0.03	1.3
11/17/94	4:30 PM	2.58	2.64	2.63	2.61	2.63	2.62	0.02	0.9
11/17/91	5:05 PH	2.61	2.57	2.59	2.66	2.62	2.61	0.03	1.3
11/17/94	5:35 PM	2.60	2.57	2.57	2.59	2.55	2.58	0.02	0.8
11/17/94	6:25 PM	2.62	2.60	2.58	2.61	2.59	2.60	0.02	0.6
11/17/94	6:55 PH	2.68	2.60	2.62	2.64	2.57	2.62	0.04	1.6







PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg

Compression - Friability (%)

1322A 4322A	Front Rear	_	0.1	_	0.08 0.08	_	
4320A	_	0.1	_	_	0.08	0.03	43.3
4320A	Front	0.04	0.1	0.1	0.08	0.03	43.3
4318A	Rear	0.1	0.1	0.03	0.08	0.04	52.7
4318A	Front	0.1	0.1	0.1	0.10	0.00	0.0
Batch #	Side	1st Third	2nd Third	inal Third	Average	St Dev.	RSD

PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg

Compression - Disintergration (min.)

ZA.	_	က	m	4	ლ.	m 9
4322A	Rear				(*)	
4322A	Front	ო	က	4	გ	3.3
4320A	Rear	3	3	4	3.3	3.3
4320A	Front	4	3	3	3.3	3.3
4318A	Rear	3	3	4	3.3	3.3
4318A	Front	3	3	3	3.0	3.0
Batch #	Side	1st Third	2nd Third	inal Third	Average	Average St Dev.

PROCESS VALIDATION

DIGOXIN TABLETS, 0.125 mg

Compression - Content Uniformity (%)

Batch #	4318A	42100	12200	10000	10000	
Side		4318A	4320A	4320A	4322A	4322A
3100	Front	Rear	Front	Rear	Front	Rear
	100.6	99.5	102.8	101.4	101.7	102.9
3	101.1	102.2	96.2	100.5	104.6	97.9
	103.5	102.9	101.2	101.7	101.0	99.1
4	100.9	101.5	101.4	99.8	102.5	99.3
5	101.9	101.1	100.6	99.0	103.1	99.8
6	101.6	102.4	99.6	99.6	101.6	99.1
7	100.1	98.9	99.3	100.8	102.3	99.9
8	101.4	101.8	99.9	100.9	99.6	100.5
9	101.9	102.6	100.0	102.0	100.1	102.0
10	101.4	102.4	99.3	97.3	104.2	101.4
11	102.3	101.1	98.0	101.2	102.9	100.7
12	99.8	101.6	98.7	99.4	103.4	100.2
13	101.4	98.9	100.8	97.4	102.1	101.5
14	102.2	102.0	101.6	98.6	100.9	99.4
15	101.8	102.0	101.0	100.7	102.6	100.6
16	101.2	103.6	99.1	100.6	101.1	99.3
17	101.5	101.2	98.0	100.3	103.3	102.1
18	99.9	101.4	100.1	100.1	104.8	102.1
19	103.5	102.4	100.2	99.7	103.5	99.3
20	102.4	100.7	93.8	100.6	103.9	101.4
21	100.8	101.0	102.0	100.7	102.7	98.9
22	100.9	100.8	103.1	100.3	103.9	99.8
23	98.7	99. <i>7</i>	102.3	99.8	102.6	99.2
24	100.9	100.9	103.8	100.5	103.2	100.5
25	102.1	100.6	101.2	102.3	102.1	99.6
26	101.7	99.9	101.0	99.9	100.1	101.0
27	100.4	101.0	102.3	101.0	101.3	102.0
28	101.0	101.2	102.9	100.6	100.0	98.9
29	101.1	102.2	99.0	101.2	98.6	100.7
30	103.2	100.1	103.6	101.5	102.0	101.6
Average	101.4	101.3	100.4	100.3	102.0	100.4
St Dev.	1.1	1.2	2.2	1.2	1.5	1.2
RSD	1.0	1.1	2.2	1.2	1.5	1.2
					1.7	1.4

PROCESS VALIDATION

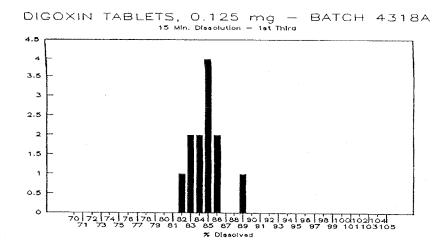
DIGOXIN TABLETS, 0.125 mg

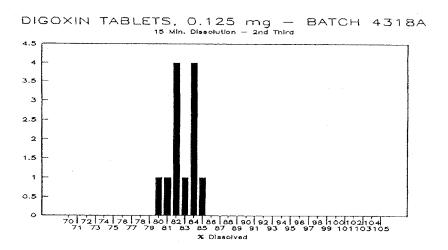
Compression - Dissolution (%) - 15 min.

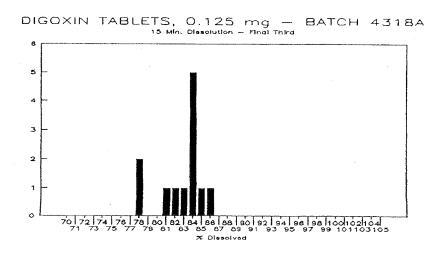
Batch #	4318A	431RA	43184	4320A	43204	43204	42734	40000	ACCOL
Samole	٠.	13	1		10701	132011	13221	13220	73227
0000	DITHE YET	01111 0117	10111	151 1110	2110 JULEO	rinai inira ist inira zna inira	151 JD1rd	7ng 1n1rd	rinai in
	84.7	81.8	77.5	83.1	85.8	87.5	81.6	78.3	8 1
2	88.1	81.2	82.3	82.7	84.3	87.0	81.7	81.2	8
3	84.5	81.3	85.0	82.2	84.7	82.3	81.7	76.0	8 1
4	85.5	83.3	80.9	81.5	84.3	85.5	80.1	78.3	87
5	85.6	81.6	77.7	81.6	84.4	82.7	82.7	82.5	87
9	82.3	83.4	84.0	84.1	87.3	84.8	85.4	80.7	38
7	83.3	83.9	83.6	86.1	86.4	81.4	81.3	81.0	96
8	81.8	79.7	83.3	84.5	87.1	87.3	83.3	83.0	98
თ	84.0	80.1	81.3	87.2	88.0	84.6	80.2	78.4	8
10	84.7	84.2	85,9	84.9	87.0	83.4	85.8	75.0	8
=	83.0	83.6	83.7	87.7	86.6	80.9	85.0	77.9	85
12	84.1	82.6	84.0	88.0	86.6	84.1	83.5	78.9	96
Average	84.3	82.2	82.4	84.5	0.98	84.3	82.7	79.4	87
St Dev.	1.7	1,5	2.7	2.3	1.3	2.3	0.1	2.4	
RSD	2.0	1.8	3.2	2.8	1.5	2.8	2.3	3.0	,

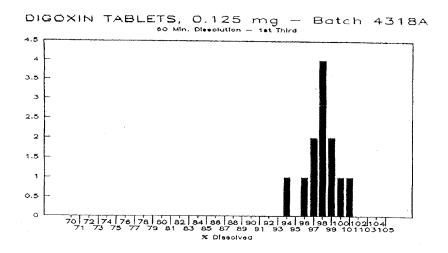
Compression - Dissolution (%) - 60 min.

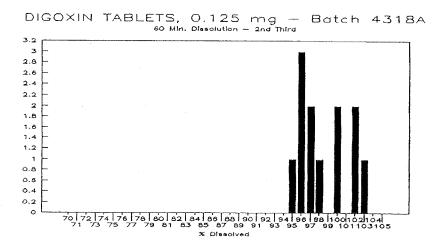
43728	Parit Inch	92.3	97.4	95.2	103.6	100.4	b 96	102 5	97 1	94.1	99 2	7 00	92.0	1 86	3 1	•
4322A	1=	1_	94 5	1 76	93.3	97.5	92.7	96.2	97.7	97.1	93.5	.94.0	91.7	94.9	2.0	-
4322A 1 4	200	94.7	96.4	94.5	100.1	101.8	98.1	101.2	96.3	98.0	103.0	100.5	97.6	98.6	2.8	
4320A	2	95.6	100.4	100.3	101.1	101.8	93.5	102.7	104.4	93.8	97.7	97.7	99, 1	99,5	3.0	· · · · · · · · · · · · · · · · · · ·
4320A	1st Third 2nd Third F	94.4	96.3	97.9	99.2	100.7	98.7	96.7	102.6	100.9	100.5	98.5	100.5	88.9	2.3	
4320A	1st Third	104.3	102.0	104.9	106.9	91.5	101.0	99.8	99.5	102.2	98.9	97.9	97.4	100.5	4.1	
4318A	Final Third	99.1	93.3	97.0	94.8	92.6	95.1	98.3	94.7	93.4	95.4	96.6	93.6	96.1	2.1	
43 18A	2nd Third	95.3	96.2	95.0	98.5	97.9	99.5	95.9	96.2	95.3	101.7	101.2	102.2	98.0	2.7	-
4318A	1st Third	93.7	97.2	98.3	99.4	96.7	97.4	96.5	98.5	97.8	95.4	98.0	100.6	97.5	1.8	
Batch #	Sample	1	2	3	4	വ	9	7	8	တ	10	=	12	Average	St Dev.	

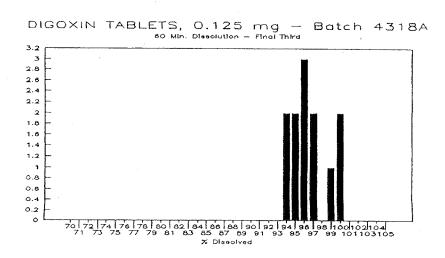


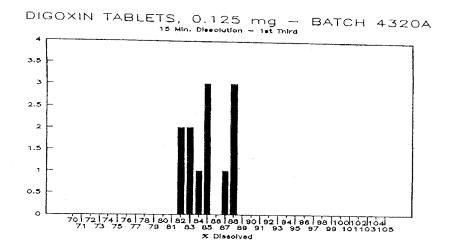


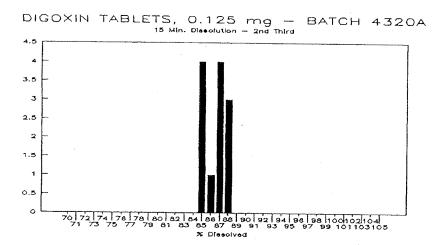


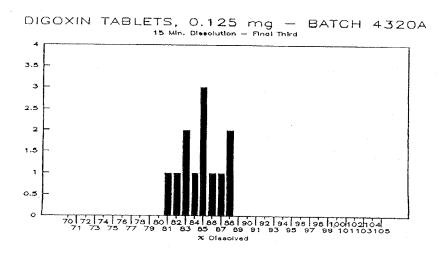


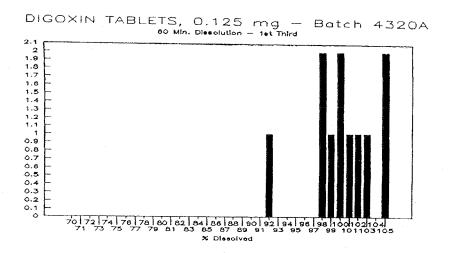


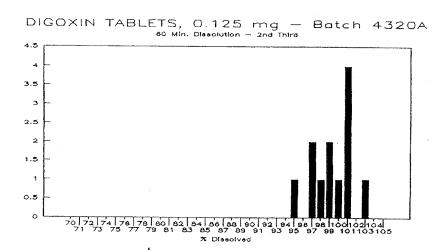


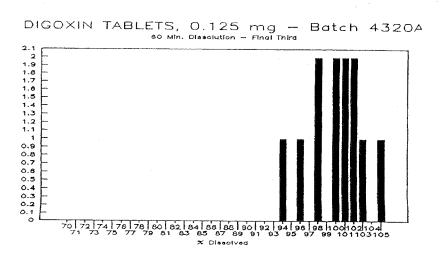


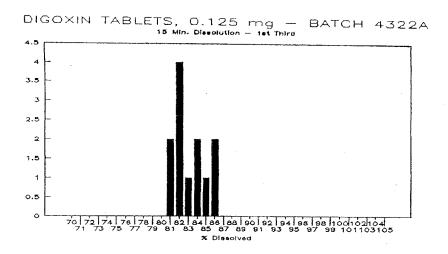


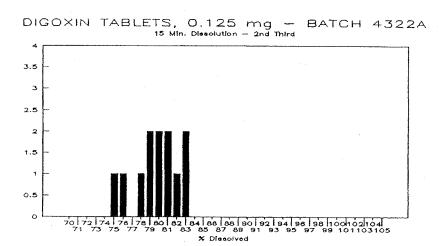


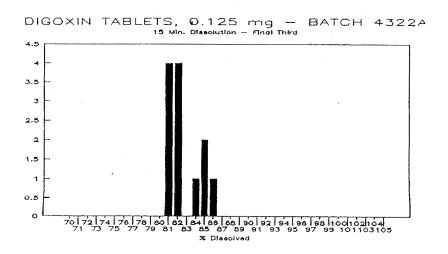


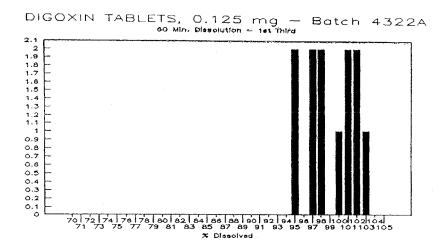


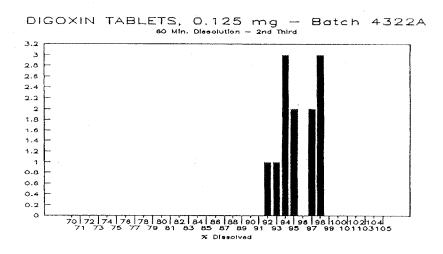


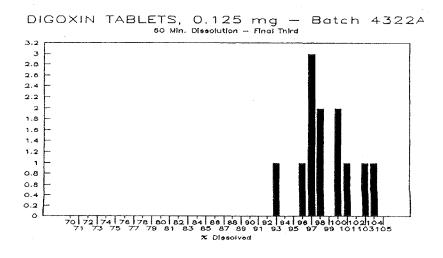










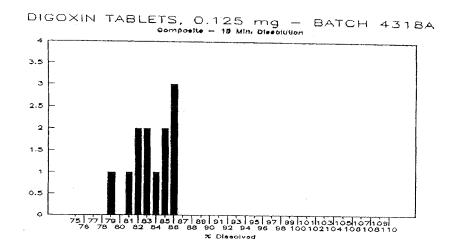


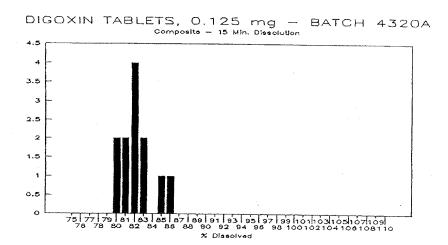
PROCESS VALIDATION

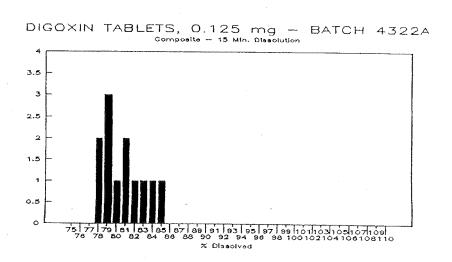
DIGOXIN TABLETS, 0.125 mg

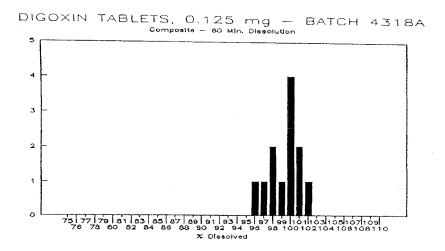
Compression - Composite Dissolution 깑

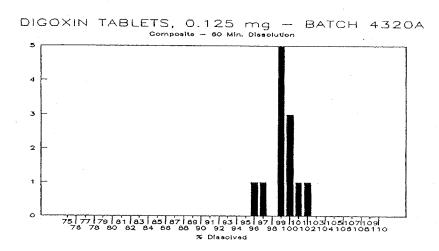
_	_		_	~			,	-	-	-			_			
4322A	60 min.	97.4		95.2	95.8	1 .	1.			95.0	1		93.6	96.5	1.8	1.9
4322A	15 min.	78.4	79.9		77.7	79.0	77.9	84.3	83.9	80.3			81.0	80.4	2.2	2.8
4320A	60 min.	99. 1	98.7	98.3	99. 1	98.4	95.9	100.5		98.4		96.5	99.5	98.7	1.6	1.6
4320A	15 min.	81.0	81.9	82.1	81.7	82.3	81.8	80.8	80.0	79.5	85.6	81.5	84.6	81.9	1.7	2.1
4318A	60 min.	100.3	100.0	97.2	96.6	101.3	98.8	99.4	95.1	97.9	98.4	100.6	93.6	98.9	1.8	1.9
4318A	15 mın.	85.8	83.0	80.6	83.1	85.3	81.7	85.6	81.9	82.5	85.0	84.6	78.1	83, 1	2.3	2.8
Batch #	Time		2	Э	4	ಬ	9	7	ω	8	10		12	Average	St Dev.	RSD

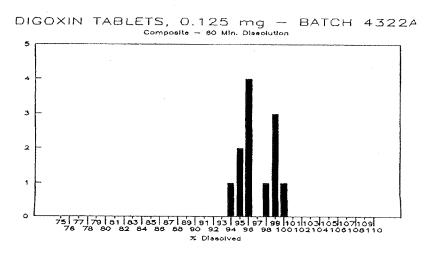












PROCESS VALIDATION

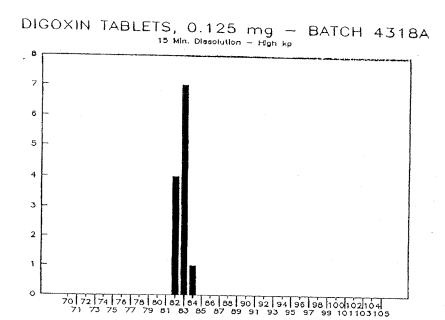
DIGOXIN TABLETS, 0.125 mg

High/Lou kp - Dissolution (2) - 15 min.

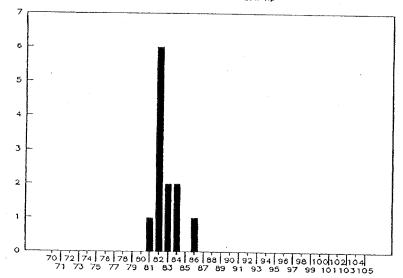
_	7		7	-	-	-				_	_	_					_	
- 1	4322H		7 2 0 0	1		ı	- 1				1	1					- 1	i .
0000,	4322H	2	2002	100	2,50	6 60	7.70	020	7	84.6	6 60	7.70	c ca	0.70	83		n, n	-
- ×0007	1322H	H Ch	Dear	1000	83.	79.0	0.0	200	1 20	833	7 20).10	77 2	· ,	000	C	ρ.7	4
V0000X	1322F	High Ko	Front	1	- 1		1		1			1		1	5.	C LL	0	7 4
1	- 1	Loukb	1	× - 0	1		1		1	- 1		1		ı	٠	٠ د		
1	1		Front	ţ	١		1		1	-1		1		ł			ļ	
			Rear								87.9							
4320A	10.40	H19h kp	Front	α •		82.9		84.8	0 00	0.50	84.0	-		ı	١		l	
43 188		רסט גים	Rear	ν , α		85. S	1 00	83.7	6 28	4.00	82.7	0	8.7.8	000	0.00	1.4		1./
43 18A	-		Front	α 		80.8	c	87.0	217	-	81.6	•	81.3	7 5 8	21.0	4.0	L	U.D
4318A	11. 44.	0 10 10 10 10 10 10 10 10 10 10 10 10 10	Rear	82.0	, ,	87.6	0 00	8.70	82		82.3	C C C	73.7	A 2 A	7	9.0	c	.α ∵
43 18A	11. de 12.	חזלוו גם	Front	81.2		81.4	7 60	0.70	82.1		87.8	0 0	01.0	82.0		9.0	c	0.0
Batch #	مارهدی	201100	Side	-	C	7	c		4	1	Ω	7		Average	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	St Dev.	מטט	בפצ

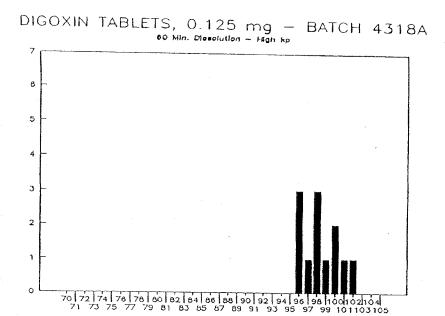
High/Low kp - Dissolution (%) - 60 min.

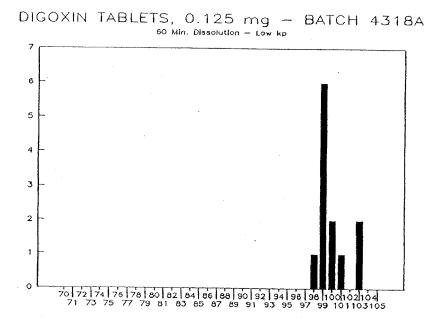
	_	_		_	-	-	-	-		_		_		_	<u>. </u>					
	4322A	101	Lou KD	Kear	4 40	11.1	9.08		ge.	1 70	×.02	40	α/,α	, on or	7.000	36.2		7:/	٠,	
	43228		00 00	-							- [- 1		1		1			
	4322A	10,01	D4 15 7	Rear	102 5	0.00	ας, α	000	0.00	7 70	7.10	00	0000	8,96	C	38.3	7 0	7.7	2 2	
	4322A	T. 5. T.	74 151																	
	4320A	2	200	ופטע	97.7	0 70	0.70	o 3	2	Q4 V		97.0	1. 1.0	7.08	2 70	200.		7:1	C.	2
	4320A	2	7		95.7	94.7		7 50		1.96		7.66		7.75	0 7 0	2:00	ıc	2	1.6	
	4320A		Daar	1		7 50									49.7				 o	
	4320A	High Ko	Front		100./	103.6		104.5		88.2	1	ς Ω,	0 00	50.3	101		2.4		2.4	
00,0,	4318A	Lou kp	Rear	, 00	38.6	98.4	0	28.	000	102.2	0	28.8	7 001	7.001	99.2		9:		1.1	
×0,0,	4318H	Lou kp	Front	0 00	102.8	99.0	` 00	32.0	,	98.4	\ 00°	33.0	- 00		93.6	,	9:		1.6	
<0+ C+	13.18H	High kp	Rear	000	100.0	101.6	000	100. 2	0 \0	36.8	- HO	1.00	0 전 4		98.3	c	2.3	C	6.3	
40104	TO 101	High Kb	Front	20 20	2000	97.4	0.70	27.3	07 7	/:/6	ص د د د	0.00	500	1	7./8	-	7 . 7	٠ د	7:7	
D . + Ch #	# 100 (C) #	Sample	Side			2	0	7	7	-	Ľ		٧		Hverage	0 . 0	o uev.	Coc	H3D	



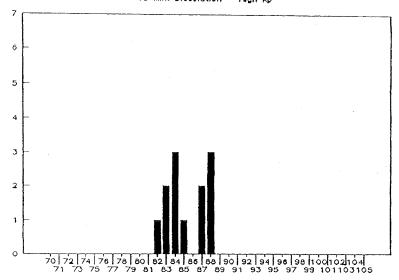




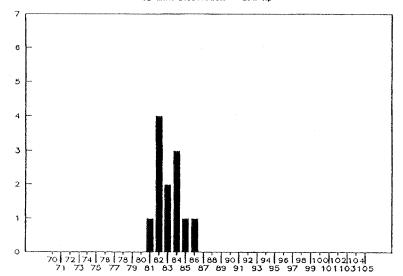


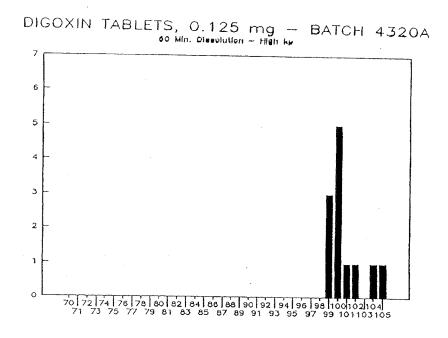


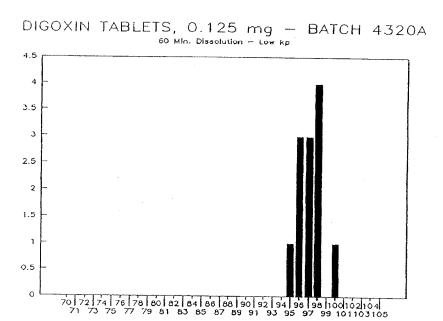




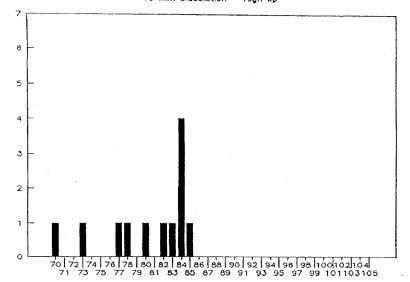
DIGOXIN TABLETS, 0.125 mg - BATCH 4320A 15 Min. Dissolution - Low kp





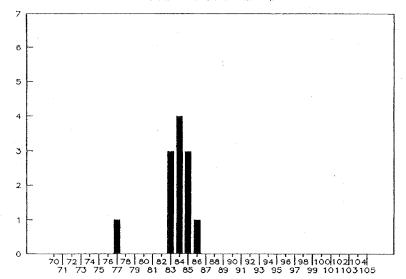


DIGOXIN TABLETS, 0.125 mg - BATCH 4322A

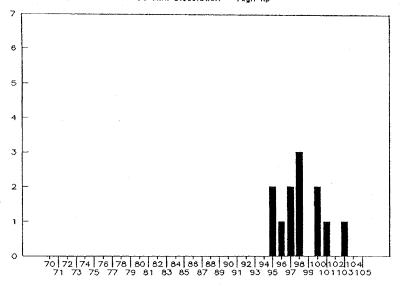


DIGOXIN TABLETS, 0.125 mg - BATCH 4322A

15 Min. Dissolution - Low kp

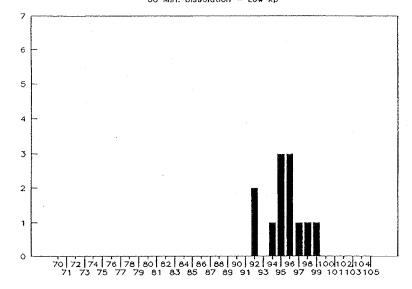


DIGOXIN TABLETS, 0.125 mg - BATCH 4322A



DIGOXIN TABLETS, 0.125 mg - BATCH 4322A

60 Min. Dissolution - Low kp



Amide Pharmaceutical, Inc.

COMPRESSION DEFARTMENT PROCESS VALIDATION

T*		Tublats 0.12		/)
PRODUCT HAME: D	16/1×131	$-1 \approx 61 \approx 10^{\circ}$	0004	/ /L ()
TEROPOCE HARE: O	14()	1401603 11.12	3 10019	((()))
/				······································

BATCH 1: 4322 4

TABLET PRESS ID 1: 66

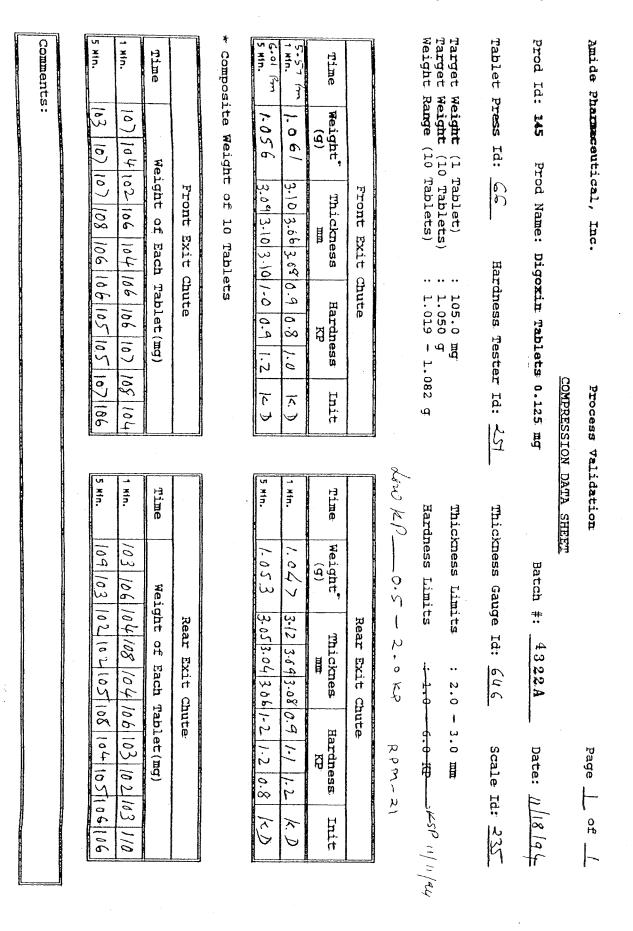
	Dimit	Time
High KP	above 6 108	5.46 Pm
Low KP	0.5-2.0 /08	5.58 PM
Maximum KP	Not Possible	
Regular Speed	21 APM	

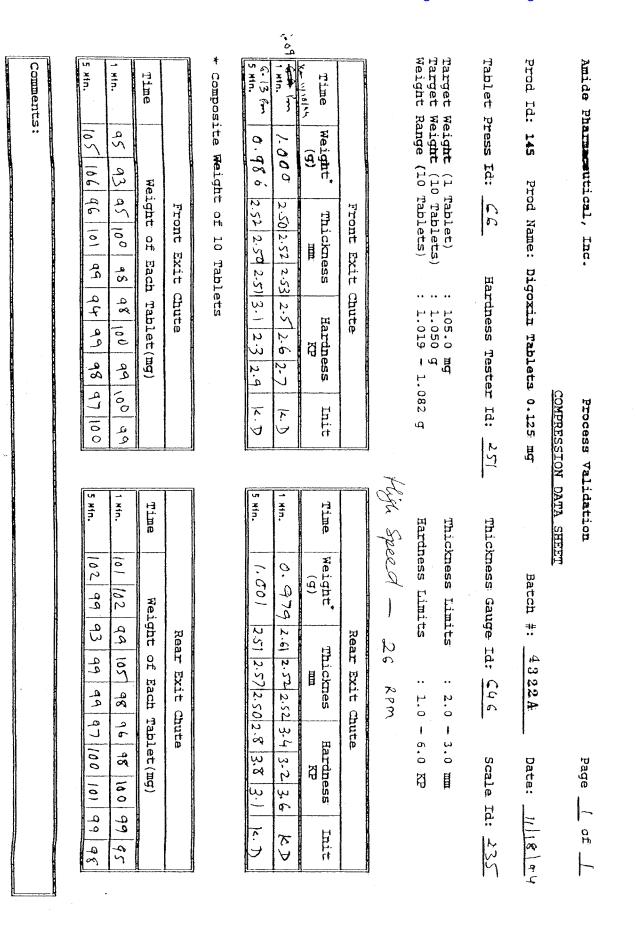
	RPM	Time
High Speed	26	6.10 pm
Low Speed	14	6.23 pm

Done By: C-P Date: 1//7/94	

Target Weight (1 Tablet)
Target Weight (10 Tablets)
Weight Range (10 Tablets) Tablet Press Prod Id: - × 5. Amide Pharmaceutical, 25 1.4 ¥15. Time Composite Weight Time 3 Weight (g) 145 1.064 Ó 104 1704 Ġ 5 Id: 106 105 106 104 109 100 108 104 108 Weight Prod Name: Digoxin Tablets 0.125 mg [0] 2.56 2.552.58 2.60 2.55 2.60 Front Front Exit 0 H Thickness 108 O Hi 10 Hac. Exit 104/107/105/105 Each Tablets Hardness Tester Id: 25 Chute Chute Tablet(mg 2.5/2.7 5.8 4.9 5.5 1.050 Hardness. KP 呵 「 1.082 108 COMPRESSION DATA SHEET Process Validation Init **₹** Ÿ 106 J 1 ×17. ¥. ¥ 151. Min. Time Hardness Limits. Thickness Limits Thickness Gauge Weight (g) 1,0 1.046 4 106 103 103 104 103 104 108 108 107 Weight 200 # 2.54 2.57 2.57 2.51 2.62 2.56 5.1 Rear Rear Exit Chute Above Thicknes Id: 108 of f 4322A EXIT Each 3 53 S 0 . 2.0 Chute 104104109 Tablet(mg 8.5 Х ı Hardness KP 3.0 4,5 Scale Date: 3.5 ئ R03-21 Hd: 25 11/18/94 1 7. Thir 235 103 Ö V

Comments:





					Comments:	Comm
						2
	5 MIN. 108 107 109 106 110 111 106 110 108 109	106 105	104 104 105 1	106 104 106 1	103 106 1	2 2
	1 MIN. 110 105 106 109 108 106 107 108 104 108	08 105	107 105 104 108	104 183	105 107 106	ı xin
	Time Weight of Each Tablet(mg)		Tablet(mg)	Weight of Each		Time
	Rear Exit Chute		Chute	Front Exit (
		-	ets	t of 10 Tablets	Composite Weight of	* 00
	[5 xfn. 1:00 - 4:01/4:1/4:1/4:1/6:4/6:0]	K.D	4.) 4.5 4.1	2.66 2.65 2.64 4.)	H '	S Hin.
	69 2.63 2.61 2.60 5.0 4.1 4.5	K.D	5.2	.62 2.64 2.65	1.6	1 Nin.
	Time Weight* Thicknes Hardness Init	Init	Hardness KP	Thickness	ne Weight (g)	Time
	Rear Exit Chute		Chute	Front Exit		
	Low Spreed _ 14 RPM		·			
	Hardness Limits : 1.0 + 6.0 KP	082 g	1.019 - 1.0	Tablets)	Range (10	Target Weight
	Thickness Limits : 2.0 + 3.0 mm				Weight (1	Target
	יייי אייי אייי אייי	ţ	pardiese tescer	1	Seal of	Tablet
-	Thickness Gauge Id: CUC scale Id: 235	Td: 25	Timpon Tootor	CC Han		
T	Batch #: 4322A Date: 11/18/94	0.125 mg	Digoxin Tablets 0.125	Name:	Id: 145 Prod	prod
	COMPRESSION DATA SHEET	OMPRESSIO	10			
	Process Validation Page of	Process V		cal, Inc.	Amide Pharmaceutical,	Ami de

Amide Pharmaceutical, Inc.

COMPRESSION DEPARTMENT PROCESS VALIDATION

PRODUCT HAME: Diguxion Tablet's 0.125 Mg (145)

BATCH #: 4318 A

TABLET PRESS ID 1: 66

	Limit	Time
High KP	expore 6 47	11.45 Hon
Low KP	0.5 - 2.0 10?	12.16 Pm
Maximum KP	Not Possible	
Regular Speed	21 88377	·

	RPM	Time
High Speed	26	12.48 Pm
Low Speed	14	1.15. 800

Done By: CP Date: ///	14/94

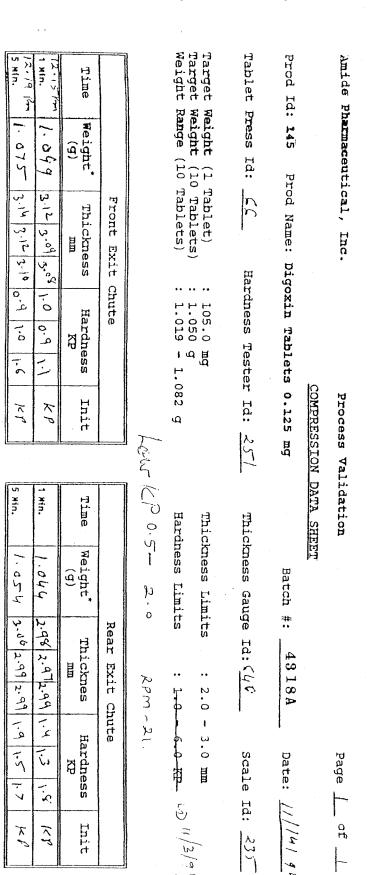
Target Target Prod Tablet Comments: S Min. Amide Pharmaceutical, 11.44 7 1 Xin. Xin. × . Composite Time Time Weight Weight Range (10 Tablets) (<u>z</u>= 106 1.0 Weight (g) 640 Weight Karaner 4 105/ Hd: (1 Tablet) (10 Tablets) Weight Prod Name: Digoxin Tablets 0.125 mg 7,5 12.57 P, S 5 Front 0 H Thickness Front g. 701 10°K 15.57 ٢٠٠٠ 0 10 o o Exit 臣xit Each Tablets ir. 4.53 °c Ł Hardness Tester 105 151 4 Chute Chute Tablet S 8 105.0 1.019 ۲ Hardness KP 105 <u>2,</u> 3 about Pat) 10,4 E D 106 7 3. 1.082 g ج. -COMPRESSION DATA SHEET Car Process Validation Hd: Init 4.0 2 How KD. ر ا د ا 4 P 5 Hin. 5 Min. Hin. Min. Time Time Hardness Limits Thickness Gauge 202 Thickness Limits weight 2/28 20 A bove Batch 0 0 203 C 25 - S-Weight عـ **≄**‡≂ 201 107 Maximum 2.54 2.53 Rear 9 .sz Id: Thicknes 763 o fi 167 43 2.60 Exit Exit 18 Each 0 ڙ 100 . (S) 253 RPMI 2.0 2 Þ 5 Chute Chute handu essi 109 106 Tablet <u>1</u> ŧ Hardness KP 3.0 105 5. <u>v)</u> 3.5 Scale Page Date: (pm) 7,5 106 Δ<u>;</u> / 13:5 9 Id: -05 00 11/1/4194 5.8 0 H Init K 20 235 106 10%

S

Atomed

Þ

11.14-54



Comments:

Min.

-

103

-

ニャ

=

=

=

E S

ري

-5

704

100

106

13)

20

105

X.

150

<u></u>

105

<u>163</u>

20,

707

901

107

107

- a C

-6

108

107

100

Time

Weight

O H

Each

Tablet(mg)

Exit

Chute

Time

Weight

OH:

Each

Tablet

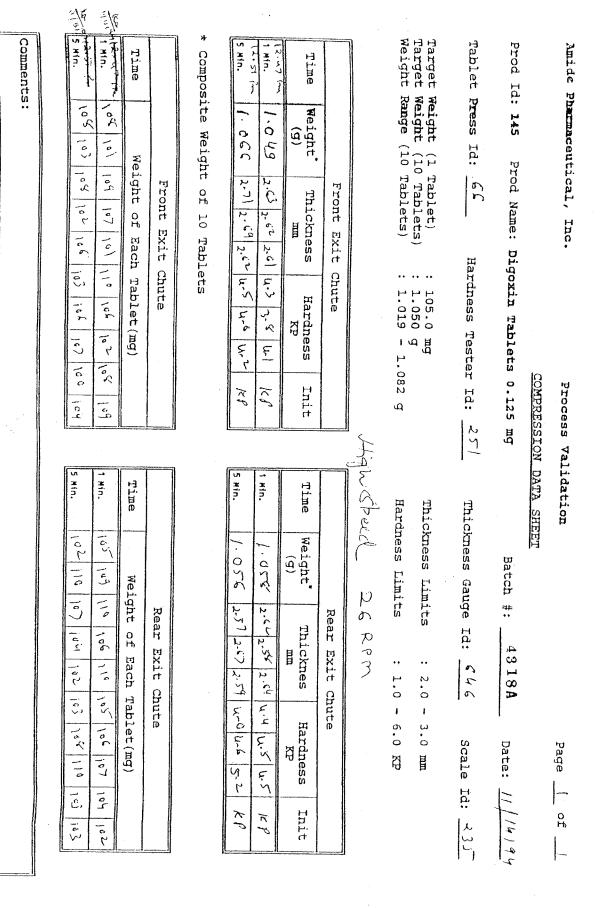
Front Exit

Chute

Composite Weight of

10

Tablets



Comments:	##n. 106 105 105 107 107 105 105 107 107 105 105 107 107 105 105 107 107 105 107 107 105 107	Time Reight Thickness Hardness Init mm KP 1.054 2.62 2.64 2.64 2.64 2.4 4.2 1.7 1.8 1.057 2.62 2.64 2.65 5.2 2.4 4.9 1.9 1.18 1.057 2.62 2.64 2.65 5.2 2.4 4.9 1.9 1.18 1.057 2.62 2.64 2.65 5.2 2.4 4.9 1.9 1.18 1.057 2.62 2.64 2.65 5.2 1.4 1.9 1.9 1.18 1.057 2.62 2.64 2.65 5.22 1.4 1.9 1.9 1.057 2.62 2.64 2.65 5.22 1.4 1.9 1.9 1.057 2.62 2.64 2.65 5.22 1.4 1.9 1.057 2.65 2.65 2.65 2.65 2.65 2.65 2.65 2.65	Target Weight (1 Tablet) : 105.0 mg Target Weight (10 Tablets) : 1.050 g Weight Range (10 Tablets) : 1.019 - 1.082 g	Prod Id: 145 Prod Name: Digoxin Tablets 0.125 mg Tablet Press Id: 66 Hardness Tester Id: 25/	
	Rear Exit Chute	Rear Exit Chute	Thickness Limits : 2.0 - 3.0 mm Hardness Limits : 1.0 - 6.0 KP	mg Batch #: 4818A Date: 1/1/14/94 Thickness Gauge Id: 646 Scale Id: 235	

1

Amide Pharmaceutical, Inc.

COMPRESSION DEPARTMENT

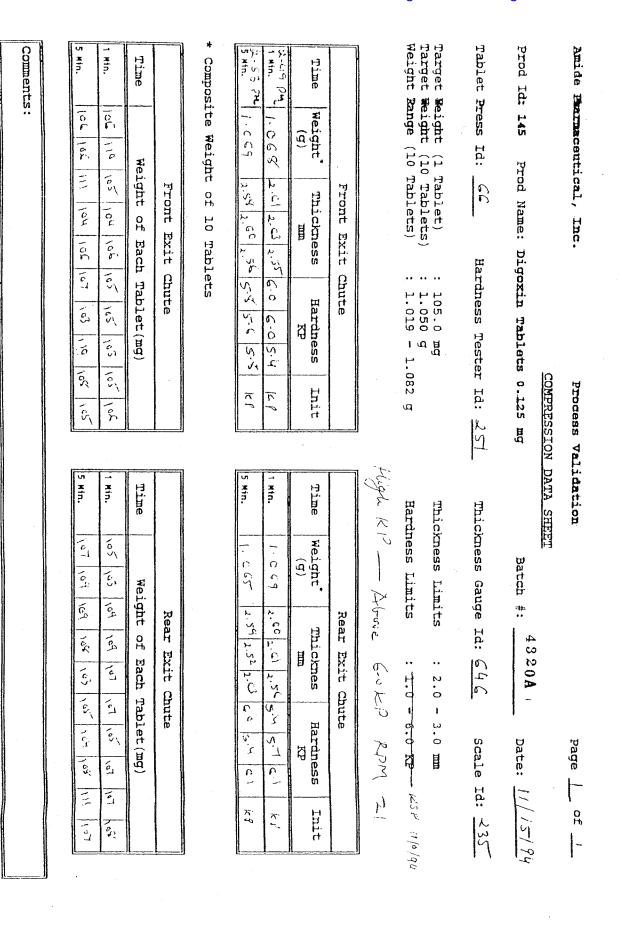
PROCESS VALIDATION

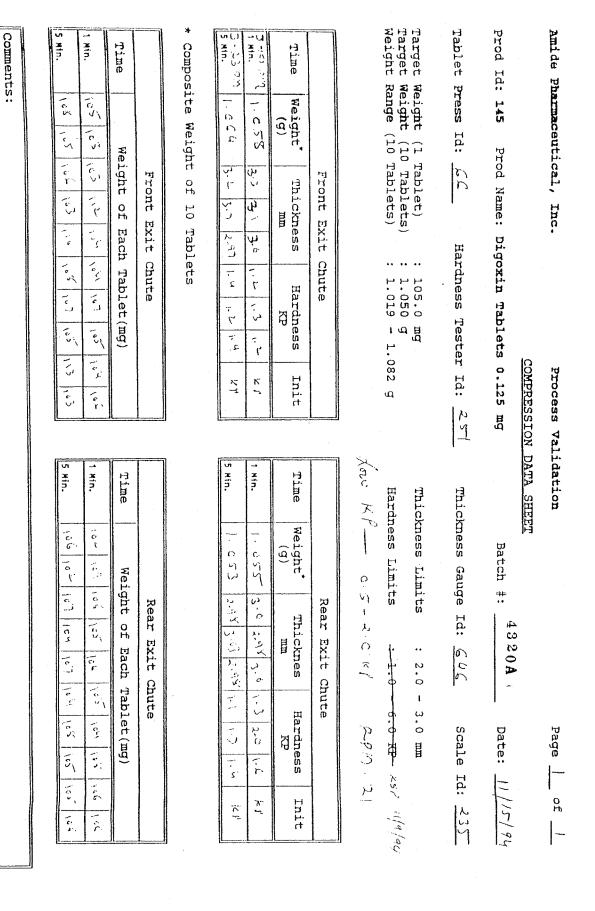
PRODUCT NAME: Digoxin	Tablects O. 125 ong (145)
0,	0
BATCH #: 4+320 /	TABLET PRESS ID #: 66

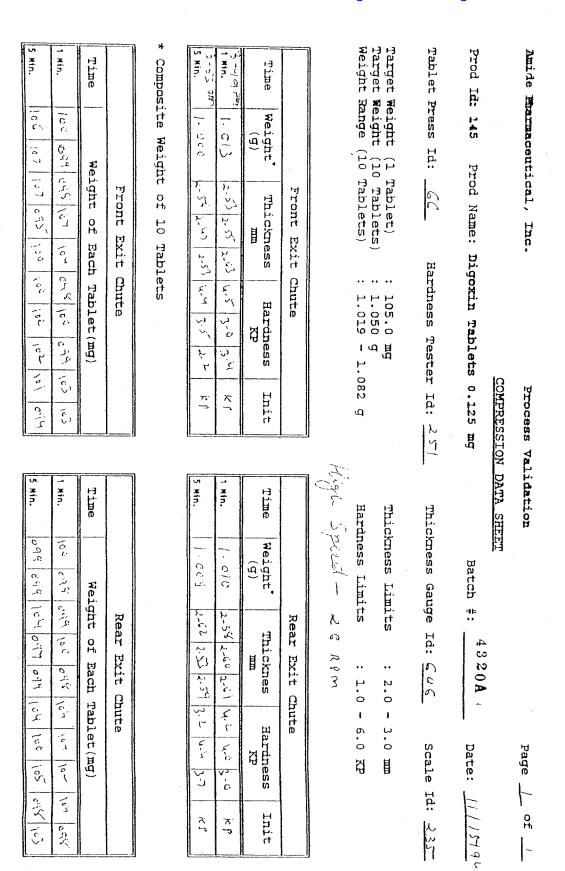
	1.imlt	Time
Iligh KP	ubore 6 10 p	2.50 Pm
Low KP	0.5 - 2.0 /cP	3.20 Pm
Maximum KP	Not Possible	
Regular Speed	21 RPM	

	RРИ	Time
High Speed	26	3.50 Pm
Low Speed	12,	4.20 8m

	A PROPERTY OF THE PROPERTY OF			
Done By:	1c. p	Date:	11/15-194	
	The second secon			F







Comments:

<u>u</u> 1				Comments:	Comm
	5 Min. 105 104 106 102 105 105 107 106 105 106	167 164 165 104	106 106 107 107	103 105	5 Xin.
	1 Min. 103 107 101 107 103 1011 1011 1011 106 106	106 111 160 104	106 100 104 106	164 164	1 Min.
	Time Weight of Each Tablet(mg)	Tablet(mg)	Weight of Each Ta		Time
	Rear Exit Chute	it e	Front Exit Chute		
			tht of 10 Tablets	Composite Weight	* Cg
	5 Min. 1.062 2-67 264 2.65 56 4.3 4.4 KI	13 H-4 Cm	3 2-65 1-65 2-64 W-C	3.4) 1.058	5 Min.
	1 min. 1.047 2.66 2.60 2.60 U.W W. W. W. K.	C 4.3 KP	2.05 2.66 2.03		T Kin.
	Time Weight Thicknes Hardness Init	Hardness Init KP	Thickness	me Weight*	Time
	Rear Exit Chute	ite	Front Exit Chute		
	Low speed 14 ppm			-	
	Hardness Limits : 1.0 - 6.0 KP		ு`	Range (Weight
	Thickness Limits : 2.0 - 3.0 mm	105.0 mg	(1 Tablet) : :	Reight beight	Target
	257 Thickness Gauge Id: 846 Scale Id: 355	Tester Id:	Id: <u>CC</u> Hardness	Press	Tablet
	g Batch #: 4820A Date: 1/1/15-194	in Tablets 0.125 mg	Prod Name: Digoxin Tablets	Id: 145	prod
	Process Validation Page of COMPRESSION DATA SHEET	Process COMPRESS	tical, Inc.	Amide Bharmaceutical, Inc.	Ami d

Amide Pharmaceutical, Inc.

rage 1 of 2

LADOBATORY TRAT BREQUT

FINIBURD DRUG PRODUCT

ETHIPHED DEGG MCMOCL				
PRODUCT: Digoxin Tablets 0.125 mg				
SPECIFICATION: USP	C	ONTROL #: 4318A		
CHEMIST: S. J/PK VOLUME	#:318.07/321.04 PAGE #: 27/	211 DATE: 11 17 194		
CHEMIST: \$7/PK VOLUME #: 318. 07/32104 PAGE #: 27/211 DATE: 11/7/0 BAMPLE STAGE: Creach Composite 314: 11/16/94.				
TEST	RESULT	LIMIT		
DESCRIPTION: Color:	Yellow	Yellow		
Profile:	Round Risected Tables	Round Disected Tablets		
Other: Debossed	of the tablet	"A 145" on bisected side of the tablet		
THICKNESS: (Guideline)	2.6 mm	2.0 mm to 3.0 mm		
WEIGHT VARIATION:	105.3 mg	\pm 10% Theo. wt (105 mg) 94.5 mg $-$ 115.5 mg		
RIABILITY:	0.02%	NMT 1.0 %		
IDENTIFICATION: (A)	The retention time of The major beak inthe Chrometofram of Affer Included Correlands To standard preparation	the major peak in the chromatogram of Assay		
ASSAY: Digoxin, 0.125 mg	100.01	90.0% to 105.0%		
UNIFORMITY OF DOSAGE UNITS: (Content Uniformity)	1) 102.38 6) 101.6 8 2) 104.6 8 7) 101.4 8 3) 103.9 8 8) 101.6 8 4) 101.5 8 9) 100.7 8 5) 9.9 8 10) 101.7 8 AV: 101.7 RSD: 1.5 1.	ATTROVELLA INTERIOR I		
(V) COMPLIES	PREPARED BY: MICEL	20 DATE: 11/11/11/		

oct3-145c

APPROVED BY: Str Zjulity 1- Palo-DATE: 11/1/Gen

harmaceutical, inc.

Page 2 of 2

LABORATORY TEST REPORT FINISHED DRUG PRODUCT

PRODUCT: Digoxin Tablets, 0.125 mg

SPECIFICATION: USP

CHEMIST: \(\frac{1}{1} \rangle k \)

VOLUME \(\frac{3}{15} \\ \frac{1}{15} \\ \frac{

T'ES'T	RESULT '	LIMIT
DISSOLUTION: Media: 500mL 0.1N HCl	15 minutes:	(Note - The specified tolerances are for %
Appar: I, rpm: 120	1) 958 \$ 7) 956 \$	dissolved, and are not to be interpreted as Q
Temp: 37°C ± 0.5°C	2) 33 0 8 8) 819 8 3) 316 8 9) 33.5 8	values.) NLT 80% of the LC of Digoxin dissolved in 60 minutes for the
Time: 60 minutes	4) 33 \$ 10) 85 0 \$	average of 12 tablets tested and no individual
	5) 853 \$ 11) 946 \$	tablet has less than 75% of the LC of Digoxin dissolved in 60 minutes.
	6) 317 \$ 12) 781 \$	If the amount of Digoxir dissolved in 60 minutes
	Average: 531 %	is more than 95% for any individual Tablet, the amount dissolved in 15
	60 minutes:	minutes is not more than 90% for each individual
	1) 1003 \$ 7) 994 8	Tablet. (LC: Labeled amount)
	2) 100 0 \$ 8) 05 1 \$ 3) 07 2 \$ 9) 07 9 \$	
	4) (16 & 10) 98:4 &	AFFIOVED
	5) 1013 \$ 11) 160·6 \$	
	6) 999 \$ 12) 99.6	BY S.D. DAIB 11 12 4M
	Average: 18.7 %	
(/ COMPLIES	PREPARED BY: Nilc.21	Edel DATE: IIII'I'I
() DOES NOT COMPLY	APPROVED BY: Suzyala	P. A. DATE: Ullar

QC13-145d

Amide Pharmaceutical, Inc.

Fage 1 of 2

LABORATORY THET REPORT

FINIBIED DRUG PRODUCT

PRODUCT: Digoxin Tablets 0.125 mg	
	CONTROL #: 4316 A
SPECIFICATION: USP	
CHEMIST: NIPK VOLUME #: 366 C1/321 04 PAGE	#: 45 213 DATE: 11 17 74
SAMPLE STAGE: our all comprole dated	d 11/16/94
	AND THE PROPERTY OF THE PROPER

TEST	RESULT	LIMIT
DESCRIPTION: Color:	1 ella	Yellow
Profile:	Parad bucceled Pallets	Round Bisected Tablets
Other: Debossed	"A 1115" on la keled side waterallet	"A 145" on bisected sid of the tablet
THICKNESS: (Guideline)	2:6 mm	2.0 mm to 3.0 mm
WEIGHT VARIATION:	104.9 mg.	± 10% Theo. wt (105 mg) 94.5 mg - 115.5 mg
RIABILITY:	0.02%	NMT 1.0 %
IDENTIFICATION: (A)	The retention time of the majors peak in the deserming and of the deserminate to the deserminate to the deserminate to the deserminate the temporal prop	The retention time of the major peak in the chromatogram of Assay prepration corresponds to standard prepration
ASSAY: Digoxin, 0.125 mg	100.61	90.0% to 105.0%
UNIFORMITY OF DOSAGE	1) 979 \$ 6) 100 }	85.0% to 115.0%
UNITS: (Content Uniformity)	2) 100 1 8 7) 978 8 3) 97.7 8 8) 99.9 8 4) 100 1 8 9) 100 3 8 5) 101 1 8 10) 101 7 8 AV: 100 5 RSD: 0.91	RSD: NHT 6.0%
(COMPLIES		Peale DATE: 11/14
() DOES NOT COMPLY	APPROVED BY: SULTRINGE	1 Palo DATE: Illian

qc13-145c

Alde Pharmaceutical, Inc.

Page 2 of 2

LABORATORY TEST BEFORT FINISHED DRUG PRODUCT

PRODUCT: <u>Digoxlu Tablets,</u>	0.125 mg	
	ee	outrob #: 4320 A
CHEMIST: K.K. VOLUME	#: 325.01 PAGE #: 177	PPIFILI : TAG
SAMPLE STAGE: _ ~~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	companil	
TEST	' RESULT	LIMIT
DISSOLUTION: Media: 500mL 0.1N NCL Appar: I, rpm: 120 Temp: 37°C ± 0.5°C Time: 60 minutes	15 minutes: 1) 81.0 \$ 7) 80 8 \$ 2) 81.7 \$ 8) 90.0 \$ 3) 82.1 \$ 9) 77.5 \$ 4) 81.7 \$ 10) 85.6 \$ 5) 82.3 \$ 11) 81.5 \$ 6) 81.8 \$ 12) 84.6 \$ Average: 81.9 \$ 2) 98.7 \$ 8) 93.2 \$ 3) 98.3 \$ 9) 93.4 \$ 4) 97.1 \$ 10) 101.8 \$ 5) 73.4 \$ 11) 96.5 \$ Average: 98.7 \$	APPROVED SEA DATE 1144
(') COMPLIES	PREPARED BY: Miceli	Rice DATE: HILLY
() DOES NOT COMPLY	APPROVED BY: SWEJELL	Publ DATE: HHAL

oci3-145d

Amide Pharmaceutical, Inc.

Page 1 of 2

LABORATORY TEST REPORT

FINIBURD DRUG PRODUCT

PRODUCT: <u>Digoxin Tablets 0.125 mg</u>	
SPECIFICATION: USP	CONTROL #: 4312 A
CHEMIST: NP/P-K VOLUME #: 321-44 PAGE #:	
BAMPLE STAGE: Overall composite of Batch	Dated 11/18/94

BAMPLE STAGE: Overall o	composite of Batch Dal	ted 11/18/94
TEST	RESULT	LIMIT
DESCRIPTION: Color:	rellar	Yellow
Profile:	Reend biscaled tablets	Round Bisected Tablets
Other: Debossed	"A145" on broakdside	"A 145" on bisected side of the tablet
THICKNESS: (Guideline)	2.6	2.0 mm to 3.0 mm
WEIGHT VARIATION:	105-4 mg	± 10% Theo. wt (105 mg) 94.5 mg - 115.5 mg
CIABILITY;	0.1%	NMT 1.0 %
IDENTIFICATION: (A)	The released time at the major peak in the Characterism of Asset PSP. Corresponds to Standard Proporties.	The retention time of the major peak in the chromatogram of Assay prepration corresponds to standard prepration.
ASSAY: Digoxin, 0.125 mg	100.8-1-	90.0% to 105.0%
UNIFORMITY OF DOSAGE UNITS: (Content Uniformity)	1) $100 \cdot 1 + 6$; $98 \cdot 5 + 6$; $20 \cdot 99 \cdot 4 + 7$; $99 \cdot 4 + 7$; $99 \cdot 4 + 8$; $91 \cdot 99 \cdot 4 + 8$; $101 \cdot 99 \cdot 8 + 8$; $101 \cdot 99 \cdot 19 \cdot 19 \cdot 19 \cdot 19 \cdot 19$; $101 \cdot 99 \cdot 19 \cdot 19 \cdot 19 \cdot 19 \cdot 19$; $101 \cdot 19 \cdot$	APPROVED BY S.D. DATE LATAY RED: NMT 6.0%
(V COMPLIES	PREPARED BY: MICRH	EXIC DATE: 1111114
() DOES HOT COMPLY	APPROVED BY: SUZJULL	1- Parlo-IDATE: Illian
	, , , , , , , , , , , , , , , , , , , ,	

ac 13-145c

Je Pharmaceutical, Inc.

Page 2 of 2

LABORATORY TEST REPORT FINISHED DRUG PRODUCT

PRODUCT: <u>Digoxin Tablets, 0.125 mg</u>	
SPECIFICATION: USP CONTROL #: 4322A	
CHEMIST: K.K. VOLUME #: 325.01 PAGE #: 204 DATE: 11/21/94	
SAMPLE STAGE: over all Composite 9 botch.	

'l'Est	RESULT '	LINIT
DISSOLUTION: Media: 500mL 0.1N NC1	15 minutes!	(Note - The specified
Appar: I, rpm: 120	1) 78,4 % 7) 84.3 %	tolerances are for % dissolved, and are not
Temp: 37°C ± 0.5°C	2) 79.9 \$ 8) 83.9 \$	to be interpreted as Q values.) NLT 80% of the
	3) 78.9 \$ 9) 80.3 \$	LC of Digoxin dissolved in 60 minutes for the
Time: 60 minutes	4) 77.7 \$ 10) 82.5 \$	dverage of 12 tablets tested and no individual
	5) 79.0 \$ 11) 81.4 \$	tablet has less than 750 of the LC of Digoxin
	6) 77.9 \$ 12) 81.0 \$	dissolved in 60 minutes if the amount of Digoxi dissolved in 60 minutes
	Average: 80.4 g	is more than 95% for an individual Tablet, the
	60 minutes:	amount dissolved in 15 minutes is not more than
	1) 97.4 \$ 7) 98.2 \$	90% for each individual Tablet.
APPROVED	2) 98.9 \$ 8) 98.4 \$	(LC: Labeled amount)
	3) 95.1 \$ 9) 95.0 \$	
	4) 95.8 \$ 10) 95.7 \$	
DATE ULLEVIE	5) 94,8 \$ 11) 99,2 \$	
and the state of t	6) 96.0 \$ 12) 93.6 \$	
	Average: 96.5 %	
(V) COMPLIES	PREPARED BY: Mileson	•
) DOES NOT COMPLY	APPROVED BY: Shayaka	PUBLIDATE: HILAL

QC13-145d

PROTOCOL No. 001

AMIDE PHARMACEUTICAL, INC.

PROCESS VALIDATION PROTOCOL

DIGOXIN TABLETS 0.125 mg MPR NO. 14502 REV. 00

BATCH SIZE: 1,600,000 TABLETS

PREPARED BY:	aprime B. R.S.
No. de la constante de la cons	Regulatory Affairs Director
DATE:	11/2/94
APPROVED BY:	Lary -
DATE:	Manufacturing Operations Director 11/3/94 PLUM Lan.
DATE:	Quality Assurance Director
DATE:	Quality Control Director 11/3) QN Abhol 6 N33
DATE:	Vice President Operations

PROCESS VALIDATION PROTOCOL - DIGOXIN TABLETS 0.125 mg NPR NO. 14502 REV.00

PURPOSE:

This document provides the procedure to be followed to validate the manufacturing process for Digoxin Tablets 0.125 mg. It applies to the next three consecutive batches to be produced.

SCOPE:

This protocol is designed to be prospective in nature.

The guidelines presented here include all steps of the manufacturing process which may have an impact on product quality. They are as follows:

Raw Materials Blending Compression

Details of the process will be found in the completed copies of the Manufacturing Batch Records which are available in the file. A summary of the process is found on the attached flow chart. The major equipment used will be documented and monitored as described in the appropriate section below.

Temperature and humidity will be monitored in the production area on a daily basis.

2% excess of Digoxin is added in the finished product to compensate for production losses.

The data gathered during the course of this study will be evaluated and any adjustments to the predetermined specifications or guidelines will be made as warranted based on the results of the three validation batches.

PROCEDURE:

RAW MATERIALS

All raw materials used in a validation batch will be certified to meet all current Amide specifications for that item. These will specifically include particle size profile, bulk density, and tamped density.

PROCESS VALIDATION PROTOCOL - DIGONIN TABLETS 0,125 mg NPR NO. 14502 REV.00

Certification may be accomplished through direct testing by Amide, or an approved contract laboratory, or through a manufacturers Certificate of Analysis.

Digoxin, USP will be tested by Amide, or an approved contract laboratory for the complete monograph. This will include bulk density, tamped density, and particle size testing.

The excipients will be tested by Amide, or an approved contract laboratory, for those parameters required for expired stock retesting. In addition, particle size, bulk and tamped density will be run on all ingredients. The other results may be taken from the manufacturers COA.

In addition to the actual results, the name of the manufacturer, and the manufacturers lot number should be included in the report.

If more than one lot of a raw material is used in the production of the three batches the data should be evaluated to determine if any differences are detectable.

The acceptance criteria will be the specification limits for those tests listed in the Specification document.

BLENDING UNIFORMITY

The preblend will be produced in the 3 cu.ft. Twin Shell Blender, (#32). The speed will be monitored and documented both empty and during blending.

The blend in this step will be subjected to further processing, no sampling will be taken at this point.

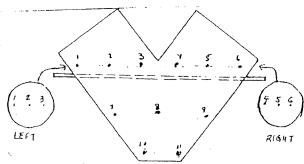
The final blend will be produced in the 10 Cu Ft. Twin Shell Blender, (#35). The speed will be monitored and documented both empty and during blending.

The sampling plan for the final blend is designed to evaluate overall blend uniformity, and those points in the blender where uniformity is most difficult to achieve. Samples are to be taken from the points shown below using only the 36 inch (small chamber) single port thief. The sample drawn should be about 315 mg which is three times the single dosage unit, and should be submitted to the laboratory in "Butter Paper."

PROCESS VALIDATION PROTOCOL - DIGOXIN TABLETS 0.125 mg MPR NO. 14502 REV.00

SAMPLING POINTS

- Left Column Top left
 Left Column Top Center
 Left Column Top Right
 Middle Left
 Middle Center
 Middle Right
- Right Column Top left
 Right Column Top Center
 Bottom Left
 Right Column Top Center
- 6. Right Column Top Right



The samples are to be analyzed individually, without being ground, for Digoxin. No composite samples are to be prepared. The sample weight used for analysis should approximate 105 mg, which is the amount of this blend which would be present in one unit of the tablet.

Acceptance criteria is $85.0 - 115.0 \$ Th for the individual data points. This product has a 2% overage to compensate for the production losses.

Three sample of about 150 g will be taken with the help of a stainless steel theif large chamber from the top center, middle senter and bottom center of the blender. This sample will be tested for physical characterization which includes; bulk and tap density and particle size analysis. This data is for characterization only and these parameters will not be used to monitor routine production. Therefore, acceptance criteria will not be established.

Confidential Subject to Protective Order

PROCESS VALIDATION PROTOCOL - DIGORIN TABLETS 0.125 mg MPR NO. 14502 REV.00

COMPRESSION

Compression will be accomplished using the stokes 45 station tablet press. The speed will be determined and documented during the validation study.

During compression samples will be collected every 30 minutes hour by QA. These samples will be evaluated for individual tablet weight, thickness, and hardness. This will be 10 tablets for weight, and five each for thickness and hardness. Front and rear samples will be tested separately and will not be composited for any test in this section unless specifically stated.

The 30 minute samples should be arranged chronologically and the batch divided into thirds. Each third should be evaluated as described below for all tests except content uniformity. The samples for each test should be prepared by selecting, as close as possible, an equal number of tablets from each 30 minute sample. If selecting one tablet per hour results in a greater number of tablets than the test requires the distribution should be as even as possible.

TEST N
Friability 10 g - 1 Run
Disintegration 6
Dissolution 12 (6 front & 6 rear)

Content Uniformity testing is to be run across the entire batch. One tablet per 30 minute sample is to be run with a minimum of 30 tablets being required. The tablets selected for testing should be weighed prior to testing and their identity maintained. If compression runs for less than 15 hours, the additional tablets should be selected as evenly distributed as possible throughout the batch.

A portion of the blend will be run at hardness of $0.5-2.0~\rm KP$ and above $6.0~\rm KP$. This will determine the effect of hardness on friability and dissolution.

Minimum quantities sufficient to equilibrate the press will be run at both lower and higher speeds. The actual ranges will be determined during production. Samples will be evaluated for hardness and weight.

Data analysis will consist of Average and Standard Deviation, with comparison both within and across the three batches. The data collected within each batch will also be evaluated for any possible trends.

PROCESS VALIDATION PROTOCOL - DIGOXIN TABLETS 0.125 mg MPR NO. 14502 REV.00

An overall composite sample will be prepared from all the 30 minute samples. This data will provide the basis for product release and will also be the initial data for stability.

Acceptance criteria will be as follows:

Target Weight (1 tablet): 105.0 mg Target Weight (10 tablets): 1.050 g Weight Range (1 tablet): 0.097 - 0.113 gThickness: 2.0 - 3.0 mmHardness: 1.0 - 6.0 KP Friability NMT 1% Identification Meets requirements. Content Uniformity 85.0% - 115.0% (RSD NMT 6.0%) Dissolution Meets USP Requirement. Assay

90.0 - 105.0%

BATCH FLOW CHART FOR DIGOXIN TABLETS 0.125 mg BATCH SIZE: 1,600,000 TABLETS MPR # 14502, REV # 00

